

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 6 | <p><b>One</b> mark for each correct feature, max <b>two</b><br/> <b>One</b> mark for each correct accompanying reason, max <b>two</b></p> <p><b>For example:</b></p> <p>Meaningful identifiers – to enable the programmer (or future programmers) to easily recognize the purpose of a variable / array / constant // to enable easy tracking of a variable / constant / array through the program</p> <p>Use of comments – to annotate each section of a program so that a programmer can find specific sections / so that the programmer knows the purpose of that section of code</p> <p>Procedures and functions – to make programs modular and easier to update / add functionality</p> |

| 2          | <p><b>One</b> mark for each correct line, <b>max three</b></p> <p><b>Use of arithmetic operator</b></p> <table> <thead> <tr> <th></th><th>Result</th></tr> </thead> <tbody> <tr> <td>355 DIV 10</td><td>5</td></tr> <tr> <td>355 / 10</td><td>355</td></tr> <tr> <td>355 MOD 10</td><td>35</td></tr> <tr> <td></td><td>35.5</td></tr> </tbody> </table> |  | Result | 355 DIV 10 | 5 | 355 / 10 | 355 | 355 MOD 10 | 35 |  | 35.5 |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------|------------|---|----------|-----|------------|----|--|------|
|            | Result                                                                                                                                                                                                                                                                                                                                                  |  |        |            |   |          |     |            |    |  |      |
| 355 DIV 10 | 5                                                                                                                                                                                                                                                                                                                                                       |  |        |            |   |          |     |            |    |  |      |
| 355 / 10   | 355                                                                                                                                                                                                                                                                                                                                                     |  |        |            |   |          |     |            |    |  |      |
| 355 MOD 10 | 35                                                                                                                                                                                                                                                                                                                                                      |  |        |            |   |          |     |            |    |  |      |
|            | 35.5                                                                                                                                                                                                                                                                                                                                                    |  |        |            |   |          |     |            |    |  |      |

|   |                                                                                                                                                                                |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | <p><b>One</b> mark for each point <b>max three</b>.</p> <ul style="list-style-type: none"> <li>Integer</li> <li>real</li> <li>char</li> <li>string</li> <li>Boolean</li> </ul> |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 2                                                     | <p><b>One</b> mark for each correct line</p> <table> <thead> <tr> <th>Description</th><th>Programming Technique</th></tr> </thead> <tbody> <tr> <td>adding a set of numbers</td><td>output</td></tr> <tr> <td>displaying the result of a calculation</td><td>selection</td></tr> <tr> <td>executing a set of instructions based on a condition</td><td>totalling</td></tr> <tr> <td>executing the same set of instructions multiple times</td><td>iteration</td></tr> <tr> <td></td><td>counting</td></tr> </tbody> </table> | Description | Programming Technique | adding a set of numbers | output | displaying the result of a calculation | selection | executing a set of instructions based on a condition | totalling | executing the same set of instructions multiple times | iteration |  | counting |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-------------------------|--------|----------------------------------------|-----------|------------------------------------------------------|-----------|-------------------------------------------------------|-----------|--|----------|
| Description                                           | Programming Technique                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |                       |                         |        |                                        |           |                                                      |           |                                                       |           |  |          |
| adding a set of numbers                               | output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |                       |                         |        |                                        |           |                                                      |           |                                                       |           |  |          |
| displaying the result of a calculation                | selection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |                       |                         |        |                                        |           |                                                      |           |                                                       |           |  |          |
| executing a set of instructions based on a condition  | totalling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |                       |                         |        |                                        |           |                                                      |           |                                                       |           |  |          |
| executing the same set of instructions multiple times | iteration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |                       |                         |        |                                        |           |                                                      |           |                                                       |           |  |          |
|                                                       | counting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                       |                         |        |                                        |           |                                                      |           |                                                       |           |  |          |
| 3                                                     | B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |                       |                         |        |                                        |           |                                                      |           |                                                       |           |  |          |

| 3        | <p><b>One</b> mark for each correct line</p> <table> <thead> <tr> <th>Operator</th><th>Operator type</th></tr> </thead> <tbody> <tr> <td>&gt;=</td><td>Boolean</td></tr> <tr> <td>AND</td><td>Arithmetic</td></tr> <tr> <td>DIV</td><td>Logical</td></tr> <tr> <td>+</td><td>Arithmetic</td></tr> </tbody> </table> | Operator | Operator type | >= | Boolean | AND | Arithmetic | DIV | Logical | + | Arithmetic |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------|----|---------|-----|------------|-----|---------|---|------------|
| Operator | Operator type                                                                                                                                                                                                                                                                                                       |          |               |    |         |     |            |     |         |   |            |
| >=       | Boolean                                                                                                                                                                                                                                                                                                             |          |               |    |         |     |            |     |         |   |            |
| AND      | Arithmetic                                                                                                                                                                                                                                                                                                          |          |               |    |         |     |            |     |         |   |            |
| DIV      | Logical                                                                                                                                                                                                                                                                                                             |          |               |    |         |     |            |     |         |   |            |
| +        | Arithmetic                                                                                                                                                                                                                                                                                                          |          |               |    |         |     |            |     |         |   |            |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | <p><b>One</b> mark for each point <b>max three</b>.</p> <ul style="list-style-type: none"> <li>variables / constants are used to store items of data</li> <li>the data stored in variables / constants are accessed by an identifier // named data stores</li> <li>the value of a variable may change during the execution of a program</li> <li>the value of a constant will remain the same during the execution of a program</li> </ul> |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|   |   |
|---|---|
| 3 | B |
|---|---|

|   |   |
|---|---|
| 1 | C |
|---|---|