Name: Class: Mark:

1. State the values of a, b, c, d and e after the following operations are carried out: [5]

(a) a ← 26 MOD 5

(b) b ← 142 DIV 7

(c) c ← (7 + 3) \* 4 – 1

(d) d ← 15.6 / 3 + 4.8 / 2

(e) e ← "4" + "56"

2. The following table shows a number of different variables and what they are used for. Complete the table to suggest appropriate data types for each of the variables. The first row has been completed for you.

|  |  |  |
| --- | --- | --- |
| Variable name | Description of what the variable holds | Data type |
| Age | A user’s age in years | Integer |
| MenuChoice | A single letter that will determine a user’s choice |  |
| Height | A height of a person in metres – e.g. 1.73 |  |
| LastName | A user’s last name |  |
| PlayAgain | True or False depending on whether the user wishes to play a game again |  |

3. The function CHAR\_TO\_CODE('a') evaluates to 97, the ASCII value of the character ‘a’.

 CODE\_TO\_CHAR(97) evaluates to 'a'.

 State what is output by this algorithm: [4]

x ← CHAR\_TO\_CODE('b')

y ← x + 1

z ← x – 1

w ← CODE\_TO\_CHAR(y) + CODE\_TO\_CHAR(z)

OUTPUT x

OUTPUT y

OUTPUT z

OUTPUT w

4. What is output by the following algorithm? [3]

Notice ← "Please do not walk on the grass"

StringLength ← LENGTH(Notice)

Left ← SUBSTRING(Notice,1,11)

Right ← SUBSTRING(Notice, LENGTH(Notice)-10, 10)

OUTPUT StringLength

OUTPUT Left

OUTPUT Right

[Total 12 marks]