

N5 Computing Science

Reading & Writing Code

1. A computer program is used to calculate the ticket price for a train from Ayr to Glasgow.

Line 1 RECEIVE age FROM (INTEGER) KEYBOARD

Line 2 IF age < 18 THEN

Line 3 SET fare TO 4.55

Line 4 ELSE

Line 5 SET fare TO 10.5

Line 6 END IF

Line 7 SEND "The fare is £" & fare

- a) State the output of this program if 18 is entered at line 1.
- b) State the output of this program if 12 is entered at line 1.
- c) State the most appropriate data type for the variable, *fare*
- d) State the purpose of the & symbol on line 7

2. A computer program is used to calculate the ticket price for a train from Ayr to Glasgow.

Line 1 RECEIVE age FROM (INTEGER) KEYBOARD

Line 2 IF age < 18 THEN

Line 3 SET fare TO 4.55

Line 4 ELSE

Line 5 SET fare TO 10.5

Line 6 END IF

Line 7 SEND "The fare is £" & fare

- e) State the output of this program if 18 is entered at line 1.
- f) State the output of this program if 12 is entered at line 1.
- g) State the most appropriate data type for the variable, *fare*
- h) State the purpose of the & symbol on line 7

3. A computer program is used to calculate the ticket price for a train from Ayr to Glasgow.

Line 1 RECEIVE age FROM (INTEGER) KEYBOARD

Line 2 IF age < 18 THEN

Line 3 SET fare TO 4.55

Line 4 END IF

Line 5 IF age < 65 THEN

Line 6 SET fare TO 10.5

Line 7 END IF

Line 8 IF age < 105 THEN

Line 9 SET fare TO 6.25

Line 10 END IF

Line 11 SEND "The fare is £" & fare

- a) State the output of this program if 75 is entered at line 1.
- b) State the output of this program if 25 is entered at line 1.
- c) Describe the problem that occurs in this program
- d) Explain how to correct this problem.