

Answers to Questions from Pass Task 2.1

Name:

Student ID:

1: Assume that age has the value 0. List the actions the computer executes when it runs the following code.

```
printf("Message 0");
while (age < 5){
    printf("Message 1");
    age = age + 1;
}
printf('Message 2')
```

Sequence	Action	Note
1	Calls the printf procedure with the text 'Message 0'	
2	Evaluates the expression (condition of while) age < 5	Condition is true.
3	Jumps into the while loop	
4		
5		Age now 1
6	Returns to the top of the while loop	
7	Evaluates the expression (condition of while) age < 5	Condition is true.
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23	Returns to the top of the while loop	
24	Jumps to the end of the while loop	
22	Calls the printf procedure with the text 'Message 2'	

2. Assume that age has the value 8. List the actions the computer executes when it runs the following code.

```
printf("Message 0");
while (age > 5){
    printf("Message 1");
    age = age - 2;
}
printf("Message 2");
```

Sequence	Action	Note
1	Calls the printf procedure with the text ‘Message 0’	
2	Evaluates the expression (condition of while) age > 5	Condition is true.
3	Jumps into the while loop	
4		
5		Age now 6
6	Returns to the top of the while loop	
7	Evaluates the expression (condition of while) age > 5	Condition is true.
8	Jumps into the while loop	
9		
10		
11		
12	Jumps to the end of the while loop	
13	Calls the printf procedure with the text ‘Message 2’	

End of Task