School of Computer Science INFO1110/9001 Quiz 1

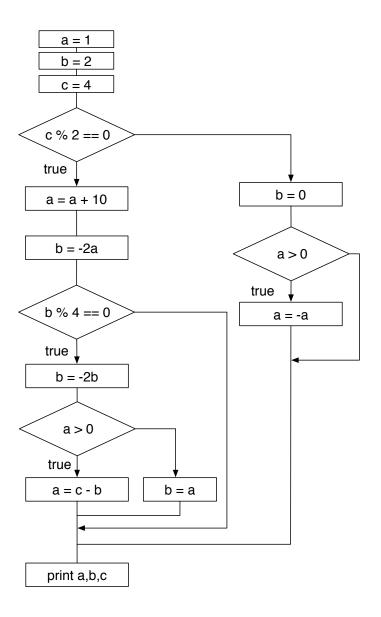
Meerkat

Instructions:

This quiz is for revision and to complete in your own time This quiz is optional and does not count toward your grade Please complete without using a python interpreter The contents of the quiz will be covered in week 5 seminar

Question 1 - 7 marks

- a) Perform a desk check on the following flowchart showing a new line for each change, and
- b) Convert the flow chart diagram to Python3 code.



Question 2 - 1 mark

What will be the value of x after this code executes?

```
1 x = 30
2 print(float(x) + 7.5)
3 x = x + 10
```

Question 3 - 3 mark

Consider the following Python3 code:

```
1  n = 13
2  m = 9
3  k = 10
4
5  x = (n == k/2) or (m > n and (n <= (k+6) or False))
6  y = (not(not x) and (n-3 == k)) or (m+3) > n
7  z = (n > (k + m)) and x or not y
```

Evaluate the expressions for x, y and z:

Question 4 - 3 marks

Consider the code:

```
1  x = "ha"
2  y = "hahaha"
3  if y == x + x + x:
4  print("x equals y")
```

The program is run using

python3 program.py

It produces an error. Describe the error:

Fix the error in the code such that the program produces the output x equals y

Question 5 - 3 marks

What is the data type of each variable at each line of code? Write your answers in the given table

	line	X	У	z
1 X = "10"	1			
2 y = "3"	2			
3 z = x + y 4 z = int(z)	3			
5 z = float(z)	4			
	5			

Question 6 - 5 marks

Write a while loop that will, given a negative number N, will count back to 0. When zero has been reached, print the words "We have reached zero!"

Example:

Input	Output
-5	-5
	-4
	-3
	-2
	-1
	0
	We have reached zero!