

Quiz 1

1. Consider the following program. What will be printed if the user enters "5" for the radius? (You may use a calculator).

```
r = 0
PI = 3.14 #Close enough!

# Formula for the perimeter of a circle given its radius
C = 2 * PI * r

# Get the radius from the user
r = float(input("Enter the circle's radius: "))

# Print the circumference
print("Circumference is ", C)
```

2. What is the result of each expression?

- (a) $(5 > 4)$ and $(3 == 5)$
- (b) not $(5 > 4)$
- (c) $(5 > 4)$ or $(3 == 5)$
- (d) not $((5 > 4) \text{ or } (3 == 5))$
- (e) (True and True) and $(\text{True} == \text{False})$
- (f) (not False) or (not True)

3. In the following program, i, j and k are variables which have been previously assigned to.

```
if i < j:
    if j < k:
        i=j
    else:
        j=k
else:
    if j > k:
        j=i
    else:
        i=k
print("i =", i, " j =", j, " k =", k)
```

What will the code print if the variables i, j and k have the following values?

- (a) i=3, j=5, k=7
- (b) i=5, j=7, k=3
- (c) i=7, j=3, k=5

4. Are the following programs equivalent?

(a)

```
user_input = 1
while user_input % 2:
    user_input = int(input("Enter a number"))
    if user_input % 2 == 1:
        continue
    print("You entered an even number!")
```

(b)

```
while True:
    user_input = int(input("Enter a number"))
    if user_input % 2 == 0:
        print("You entered an even number!")
        break
    continue
```