

CS1026 Computer Science Fundamentals

Extra Questions

Answer each of the following questions.

1) For each of the following provide a short answer.

a) What is $12.0/3$?

b) What is $13//3$?

c) What is $13 \% 3$?

2) What is the difference between `=` and `==` ?

3) What is output by the following code segment?

```
values = ["Q", "W", "E", "R", "T", "Y"]
print(values[2 : 4])
```

4) Consider the following code segment. It should display a message only if the cost is between 50 and 75 dollars. The message should also be displayed if the cost is exactly 50 dollars or exactly 75 dollars.

```
if _____ :
    print("The cost is in the desired range")
```

What condition should be placed in the blank to achieve the desired behavior?

5) What is the output of the code snippet given below?

```
s = "abcde"
i = 0
while i < 5 :
    if i > 1 :
        print(s[i])
    i = i+1
```

6) What does the following code snippet print?

```
position = 0
str = input("Enter a string")
while position < len(str):
    if str[position] in 'aeiou' :
        print(position)
        position = position + 1
```

7) What will be the output of the following code snippet?

```
for i in range(0,7) :
    for j in range(7, i, -1) :
        print("*", end="")
    print("")
```

8) The following function is supposed to add 1 to any odd integers in the list. The function has 3 logic errors. Identify the logic errors and correct them. Note that there may be more than one logic error on a line.

```
def addOne(values) :
    for i in range(1,len(values)) :
        if values[i] % 3 == 0 :
            values[i] = values[i] + 1
```