

Test 2 Review Questions

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1

- What command selects a random number from the following set
[1,4,8,12,16,20,24]

2

- When determining whether a number is within a range which is the logical operator you would typically use?

3

Draw a hierarchy chart.

```
def main():  
    functionA()  
    functionB()  
  
def functionA():  
    functionD()  
  
def functionD():  
    functionE()  
  
def functionB():  
    functionX()  
    functionY()
```

4

- What is the difference between single alternative, dual alternative and nested decision structures? How are they represented in code?

5

- What is the difference between a condition controlled loop and a count controlled loop? How are they represented in code?

6

What is the output?

```
string1 = 'New York'
string2 = 'Boston'
mySillyFunction()
string1 = 'Detroit'
String2 = 'New York'
mySillyFunction()

def mySillyFunction():
    if string1 > string2:
        print string2
        print string1
    else:
        print string1
        print string2
```

7

- What values can you assign to a variable whose data type is `bool`?

8

How many times will 'Hi' be printed?

```
count = 10
while count < 20:
    print 'Hi'
```

9

- What are augmented assignment operators? Give an example.

10

What's the output?

```
total = 0
for count in range(1,6)
    total = total + count

print total
```

11

- Write a value returning function named `double_me()` that has 1 parameter, a number. The function should double the number and return the value.
- Ask the user to input a number and then call the function with that number as its argument
- All input and output should be done outside the function.

12

- See Homework 3 sample solutions of the programming assignments.