**Loops**

1) How many times does this loop print “Hello”?

for i in range(3,7):  
 print(“Hello”)

2) Make me a **while loop** that prints the numbers 100 .. 120 including both the 100 and the 120.

3) How many times does this print “Count”?

for i in range(10):

for j in range(20):

print(“Count”)

4) What does this code print? What number does it print?

sum = 0  
 x = 1

while x < 5:

sum = sum + x

x = x \* 2

print(sum)

5) Make me a loop that prints the even number 2...1000 including both the 2 and the 1000

**If Statements (Hint: At least one of these is tricky .. so read carefully)**

1) What does this code print?

a = 1

b = 2

if a != 1 and b != 2:

print(“Apple”)

elif a == 1:

print(“Banana”)

else:  
 print(“Pear”)

2) What does this code print?

a = 1

b = 2

if a == 1:

print(“Apple”)

if b == 1:

print(“Banana”)

else:  
 print(“Pear”)

3) Make me a if statement that prints “More” if ‘a’ is greater than ‘b’, “Equal” if ‘a’ is the same value as ‘b’, and “Less” is ‘a’ is less than ‘b’.

4) Which values of ‘a’ cause this code to print “Airplane”?

if a > 10:

print(“Boat”)  
 elif a < 20:

print(“Car”)

elif a == 3:

print(“Airplane”)

else:

print(“Airplane”)

**Lists**

(Assume for each of these questions there is a list l = [‘a’, ‘b’, ‘c’, ‘d’, ‘e’]

1) What does this print?

print(l[2])

2) What does this print?  
 print(l[-2])

3) What does this code print?  
 l = [‘a’, ‘b’, ‘c’, ‘d’, ‘e’]  
 l.append([1,2,3])

print(len(l))

3) What does this print?  
 Q= [[1,2], [3,4], [5,6,7]]

print(Q[1][1])

4) Make me a slice that prints the last four elements of some list R. Assume that R has more than four elements.

**Files**

1) (int/float/bool/string) In the code below, what TYPE is the variable ‘p’?

f = open(“filename”)

for p in f:

print(p)

2) How many times does the code above print?

Once Once per number

Once per file Once per byte in the file

Once per line It never prints  
 Once per word Dogs are better than cats

**Functions**

1) Write me a function that prints it’s second argument. It should be named ‘second’. So if I execute second(“steve”, 14) it should print 14 and if I execute second(14, “steve”) it should print steve.

2) Write me a function that returns either 7 or it’s argument, whichever is bigger. It should be named ‘maybe’. So for example ..

x= maybe(3)  
 print(x) # should print a 7  
  
 x = maybe(22)  
 print(x) # Should print a 22