**Part 1**

**1.** answer = "A difference between python2 and python3 is that python3 requires parentheses for the print function"  
print(answer)

**2.** x = [0, 1, 2, 3, 4, 5, 6]  
print(x[2])

**3.** x = [0, 1, 2, 3, 4, 5, 6]  
x.reverse()  
y = x  
print(y)

**4.** x = [0, 1, 2, 3, 4, 5, 6]  
z = x[1:6:2]  
print(z)

**5.** # x = 99  
# if (x > 0) is True  
# print('x is positive')  
  
x = 99  
if x > 0:  
 print('x is positive')

**Part 2**

**1.** nterms = int(input("Number of terms wanted"))  
  
  
n1, n2 = 0, 1  
count = 0  
  
if nterms <= 0:  
 print("Incorrect input")  
else:  
 print("fibonacci sequence:")  
 while count < nterms:  
 print(n1)  
 nth = n1 + n2  
 n1 = n2  
 n2 = nth  
 count += 1

**2.** x = [2.0, 3.0, 5.0, 7.0, 9.0]  
  
i = x[1]  
while i <= x[4]:  
 y = (((3.0 \* i)\*\*2)/((99 \* i) - (i\*\*3))) - (1/i)  
 ylist = []  
 ylist.append(y)  
 print(ylist)  
 i += 2

**3.** a = float(input("enter a value for a"))  
b = float(input("enter a value for b"))  
c = float(input("enter a value for c"))  
  
x0 = ((b \* -1) + (b\*\*2 - 4\*a\*c)\*\*0.5)/(2\*a)  
x1 = ((b \* -1) - (b\*\*2 - 4\*a\*c)\*\*0.5)/(2\*a)  
  
print(x0)  
print(x1)

**4.** x = 1  
y = 2  
i = x\*\*y  
while i < 2000:  
 x = x + 1  
 i = x\*\*y  
 Numbers = [x]  
  
print(max(Numbers))

**5.**