

## CIS 125 Principles of Programming Logic

### Python Loops Practice

Code	Output
<pre>for i in range(0,5):     print("i = ", i)</pre>	
<pre>for i in range(0,1):     print("i = ", i)     for j in range(1,7,3):         print("j = ", j)</pre>	
<pre>while (x &lt; 3):     print("x = ", x)</pre>	
<pre>x = 1 while (x &lt; 4):     print("x = ", x)</pre>	
<pre>x = 1 while (x &lt; 4):     print("x = ", x)     x+=1</pre>	
<pre>x = 1 while (x &lt; 10):     print("x = ", x)     x+=4</pre>	
<pre>y = 1 for x in range (10,20,3):     print("x = ", x, "y = ", y)</pre>	
<pre>for x in range (6,2,-1):     print("x = ", x)</pre>	
<pre>y = 1 for x in range (6,2,-1):     print("x = ", x, "y = ", y)     y +=3</pre>	

Code	Output
<pre> x = 1 y = 5 while (x &lt; 4 and y &lt;= 10):     print("x = ", x, "y = ", y)     x += 1     y += 3 </pre>	
<pre> x = 3 again = True while again:     print("x = ", x)     x += 3     if x &gt; 10:         again = False </pre>	
<pre> x = 4 while x % 2 == 0:     print("x = ", x)     x += 1 </pre>	
<pre> x = 2 y = 2 while (x &lt; 10):     print ("x ", x)     if x &lt; 5:         x += 1     else:         x += 2 </pre>	
<pre> x = 0 y = 2 while (x &lt;= 10):     print("x = ", x)     x += y </pre>	

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**Python Loops Practice**  
**Answer Key**

Code	Output
<pre>for i in range(0,5):     print("i = ", i)</pre>	i = 0 i = 1 i = 2 i = 3 i = 4
<pre>for i in range(0,1):     print("i = ", i)     for j in range(1,7,3):         print("j = ", j)</pre>	i = 0 j = 1 j = 4
<pre>while (x &lt; 3):     print("x = ", x)</pre>	Traceback (most recent call last): File "D:/HFCC/CIS 125/Python Examples/loop13.py", line 1, in <module> while (x < 3): NameError: name 'x' is not defined
<pre>x = 1 while (x &lt; 4):     print("x = ", x)</pre>	x = 1 x = 1 x = 1 **** endless loop ****
<pre>x = 1 while (x &lt; 4):     print("x = ", x)     x+=1</pre>	x = 1 x = 2 x = 3
<pre>x = 1 while (x &lt; 10):     print("x = ", x)     x+=4</pre>	x = 1 x = 5 x = 9
<pre>y = 1 for x in range (10,20,3):     print("x = ", x, "y = ", y)</pre>	x = 10 y = 1 x = 13 y = 1 x = 16 y = 1 x = 19 y = 1
<pre>for x in range (6,2,-1):     print("x = ", x)</pre>	x = 6 x = 5 x = 4 x = 3
<pre>y = 1 for x in range (6,2,-1):     print("x = ", x, "y = ", y)     y +=3</pre>	x = 6 y = 1 x = 5 y = 4 x = 4 y = 7 x = 3 y = 10

Code	Output
<pre> x = 1 y = 5 while (x &lt; 4 and y &lt;= 10):     print("x = ", x, "y = ", y)     x += 1     y += 3 </pre>	<pre> x = 1 y = 5 x = 2 y = 8 </pre>
<pre> x = 3 again = True while again:     print("x = ", x)     x += 3     if x &gt; 10:         again = False </pre>	<pre> x = 3 x = 6 x = 9 </pre>
<pre> x = 4 while x % 2 == 0:     print("x = ", x)     x += 1 </pre>	<pre> x = 4 </pre>
<pre> x = 2 y = 2 while (x &lt; 10):     print ("x ", x)     if x &lt; 5:         x += 1     else:         x += 2 </pre>	<pre> x 2 x 3 x 4 x 5 x 7 x 9 </pre>
<pre> x = 0 y = 2 while (x &lt;= 10):     print("x = ", x)     x += y </pre>	<pre> x = 0 x = 2 x = 4 x = 6 x = 8 x = 10 </pre>