

Loops practice

Quickly answer the following questions to see what you already know about loops:

1. What are the differences between for and while loops?
2. Explain the different parts of the for loop.
3. What is the most common cause of infinite while loops?

What would each of the following loops print?

Code	Output
<pre>for i in range(4): print "*"</pre>	
<pre>x = range(2,5) for j in x: print j</pre>	
<pre>sum = 0; for i in range(1,6): sum = sum + i print "sum=", sum</pre>	
<pre>x = [2, 5, 3] sum = 0; for i in range(len(x)): sum = sum + x[i] print "sum=", sum</pre>	
<pre>x = [2, 5, 3] sum = 0 for i in x: sum = sum + i print "sum=", sum</pre>	
<pre>for letter in "Eleazar": print letter</pre>	

Code	Output
<pre>for x in range(2): print 'yes' for y in range(2): print 'no'</pre>	
<pre>n = 3 while n <= 9: print n n = n + 1</pre>	
<pre>i = 5 while i > 0: print 'yes' i = i - 1</pre>	
<pre>i = 5*4 while i < 10: print 'here' i = i - 5</pre>	

Write loops to do the following:

1. Print every even number between 6 and 24 inclusive.
2. Print numbers between 100 and 1, going down by 1.
3. Prompt the user for a word until they provide one that starts with a 'y.'
4. Print every other letter in a word.
5. Print a word backwards (it's a repeat of something you should already have done; you can do it in three lines).
6. Prompt the user for numbers until they type in -1. Print the sum of all numbers input.
7. Simulate picking a number from one to a hundred until the number 50 is picked. Print how many guesses it took.