For Loops

Try this code:
 	
``
for i in range(10):
    print("Mr. Clarkson is awesome!")
``
	What colour are the words **for** and **in**?	

	What does this mean?	
	What happens to the indented line?	
	How many times does this happen?	
	How would you make it happen 20 times?	

Choose how many times to repeat:
 	
``
num = int(input("How many loops? "))
for i in range(num):
    print("Computing is easy!")
``
	Give the name of the variable in the first line.	

	What data type is that variable?	
	Explain the purpose of that variable.	

For Loops		

Use the counter:
 	
`for i in range(10):`
   `print( "Step" , i )`
	How many times does the loop repeat?	

	What happens to the value of i?	
	What is interesting about the first number printed?	
	What is interesting about the last number printed?	
	Rewrite the first line to print numbers from 0 to 15.	

Set the start and end point:
 	
`for i in range(5,12):`
   `print( "Step" , i )`
	What is the first value printed?	

	What is the last value printed?	
	Rewrite the first line to print numbers from 20 to 30.	
	Change the first line to: `for i in range(0,100,10)` Explain what each value means.	

Lines Cheat

A naughty pupil has been given lines to copy as a punishment from their Computing teacher. The have been asked to type out "I must not behave like muppet in class" 20 times. Write a program that asks a pupil to enter a sentence. The same sentence should then be displayed 20 times.

Which sentence would you like copied? Input

I must not behave like a muppet in class.

I must not behave like a muppet in classOutput
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.

↓x20

For Loops

Name Switch

An artist has been experimenting with making art from peoples name. Their first attempt involves repeatedly swapping someone's firstname and surname to create a pattern. Write a program that asks for two names to be entered and then uses the input to display the correct pattern.

Please enter first name: Input
Bob
Please enter surname:
Tomlinson

Bob Tomlinson Bob Tomlinson Output
Tomlinson Bob Tomlinson Bob
Bob Tomlinson Bob Tomlinson
Tomlinson Bob Tomlinson Bob
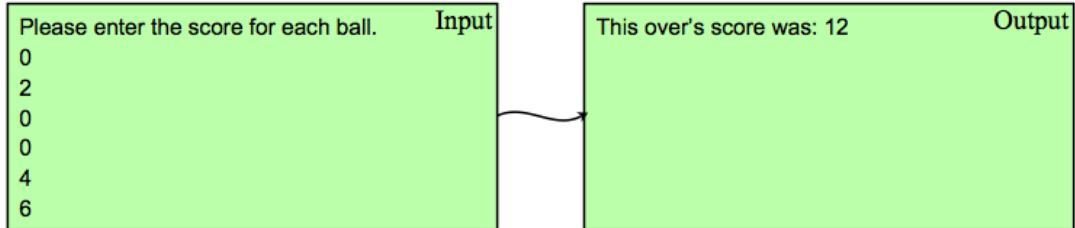Bob Tomlinson Bob Tomlinson
Tomlinson Bob Tomlinson Bob

For Loops

Cricket Over

In cricket a bowler bowls 6 balls at a time. This is called an 'over'.

Write a program that allows 6 scores to be entered (for example, 0,2,0,0,4,6). One for each ball in the over. The total scored in that over should then be displayed.
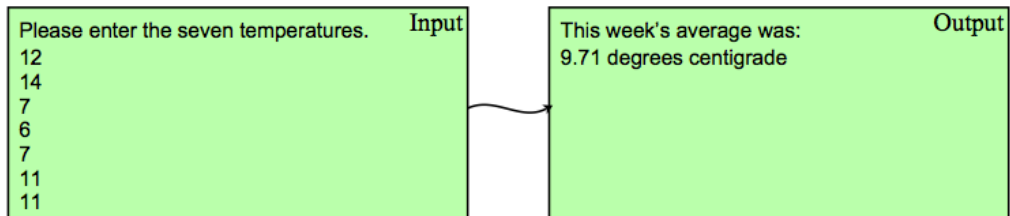
Input
Please enter the score for each ball. 0 2 0 0 4 6

Output
This over's score was: 12

For Loops

Average Temperature

A weather experiment is set up to calculate the average temperature on a mountain peak during the course of a week. The following measurements are taken at 1pm every day.

Mon 12°C	Tue 14°C	Wed 7°C
Thur 6°C	Fri 7°C	Sat 11°C
Sun 11°C		

A program is required to allow the experimenter to enter the 7 temperatures. The average for the week should then be displayed, to two decimal places, as shown below.

```
Please enter the seven temperatures.    Input
12
14
7
6
7
11
11
```

```
This week's average was:      Output
9.71 degrees centigrade
```

For Loops

Lines Cheat (Part 2)

The naughty pupil forgot to hand their lines in and now has more to do. Adapt program 21 to allow the pupil to select how many lines the program produces.

Which sentence would you like copied? Input
I must not behave like a muppet in class.
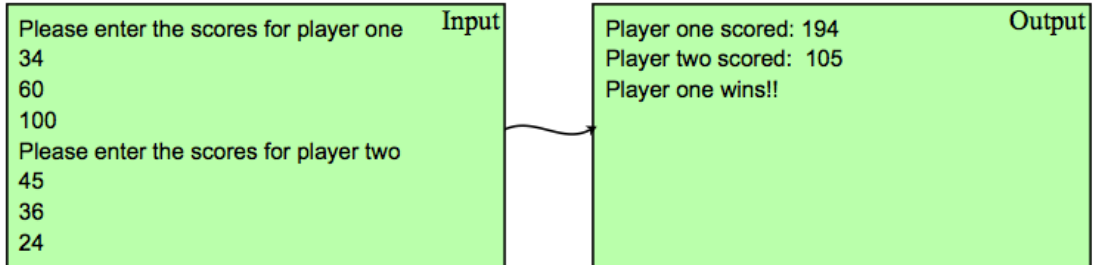How many times would you like this copied?
54

I must not behave like a muppet in classOutput
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.
I must not behave like a muppet in class.
↓x54

For Loops

Pailwater Darts Tournament

Jack and Jill are competing in the annual Pailwater darts competition. Each competitor throws 9 darts (3 lots of 3 darts) each. The player with the highest total score is the winner.
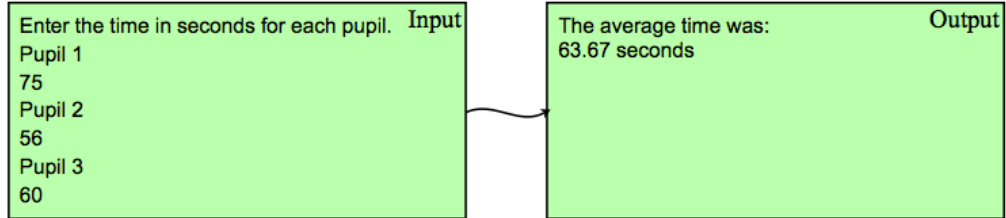
Write a program to calculate both scores and announce the winner.

Input

Please enter the scores for player one
34
60
100
Please enter the scores for player two
45
36
24

Output

Player one scored: 194
Player two scored: 105
Player one wins!!

For Loops

Press Up Challenge

Naebor High School have organised a fitness challenge with nearby Wisnaeme Academy. Each school picks their three fittest pupils and record the average time it takes them to do 50 press ups. Write a program that asks a user to enter a time for pupil as shown below (note that the pupils are numbered). The program should then display the average time (to 2 decimal places).

```
Enter the time in seconds for each pupil.   Input
Pupil 1
75
Pupil 2
56
Pupil 3
60
```

```
                              Output
The average time was:
63.67 seconds
```

For Loops

Number Patterns

A math teacher wishes to show her class a variety of number patterns. She starts by showing her class a list of odd numbers, explaining that the pattern starts at 1 and then misses out every second number:

1 3 5 7 9 11

Write a program to display the list of odd numbers shown above.

Input

Odd Numbers
1
3
5
7
9
11

Output