

Python existing functions

Sample of Math functions

```
import math
```

```
print (pow(3,2)) # 9
print (3**2)     # 9
```

Sample of String functions

```
str = "python"
print(str.upper()) # PYTHON
print(len(str))    # 6
```

```
print(round(3.7)) # 3
print(floor(3.7)) # 4
```

Creating functions in Python

```
# This program displays a random number in the range of 1 through 10.
import random
```

```
def main():
    # Get a random number.
    number = random.randint(1, 10)
    # Display the number.
    print('The number is', number)
```

```
# Call the main function.
main()
```

Test-run:

```
=== RESTART: /Users/staff/Downloads/py1.py ===
The number is 6
>>>
=== RESTART: /Users/staff/Downloads/py1.py ===
The number is 4
>>>
=== RESTART: /Users/staff/Downloads/py1.py ===
The number is 2
>>>
```

```
# This program demonstrates a function that accepts
# two arguments.
```

```
def main():
    print('The sum of 12 and 45 is')
    show_sum(12, 45)
```

```
# The show_sum function accepts two arguments
# and displays their sum.
```

```
def show_sum(num1, num2):
    result = num1 + num2
    print(result)
```

```
# Call the main function.
main()
```

Test-run:

The sum of 12 and 45 is 57

```
"""
```

```
This program shows how to create a function.
```

```
Author: Sam
```

```
"""
```

```
import random
```

```
# This function adds the two numbers and display the result
```

```
def show_sum(num1, num2):
    result = num1 + num2
    return result
```

```
def main():
    x1 = eval(input("Enter a number: "))
    x2 = eval(input("Enter another number: "))
    print("The sum is", show_sum(x1, x2))
```

```
main()
```

Test-run:

Enter a number: 20

Enter another number: 5

The sum is 25