```
1   # This program displays a random number in the range of 1 through 10.
2   import random
3
4   def main():
5       # Get a random number.
6       number = random.randint(1, 10)
7       # Display the number.
8       print('The number is', number)
9
10  # Call the main function.
11  main()
12
```

```
=== 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
>>>
```

Sample of Math functions

```
import math

print (pow(3,2))  # 8
print (3**2)      # 8
```

Sample of String functions

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

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

```
1   # This program demonstrates a function that accepts
2   # two arguments.
3
4   def main():
5       print('The sum of 12 and 45 is')
6       show_sum(12, 45)
7
8   # The show_sum function accepts two arguments
9   # and displays their sum.
10  def show_sum(num1, num2):
11      result = num1 + num2
12      print(result)
13
14  # Call the main function.
15  main()
```

Enter the amount of sales: 10000

```
1   # This program uses the return value of a function.
2
3   def main():
4       # Get the user's age.
5       first_age = eval(input('Enter your age: '))
6
7       # Get the user's best friend's age.
8       second_age = eval(input("Enter your best friend's age: "))
9
10      # Get the sum of both ages.
11      total = sum(first_age, second_age)
12
13      # Display the total age.
14      print('Together you are', total, 'years old.')
15
16  # The sum function accepts two numeric arguments and
17  # returns the sum of those arguments.
18  def sum(num1, num2):
19      result = num1 + num2
20      return result
21
22  # Call the main function.
23  main()
```

```
Enter your age: 60
Enter your best friend's age: 35
Together you are 95 years old.
```

```
1  # This program the rolling of dice.
2  import random
3
4  # Constants for the minimum and maximum random numbers
5  MIN = 1
6  MAX = 6
7
8  def main():
9      # Create a variable to control the loop.
10     again = 'y'
11
12     # Simulate rolling the dice.
13     while again == 'y' or again == 'Y':
14         print('Rolling the dice . . .')
15         print('Their values are:')
16         print(random.randint(MIN, MAX))
17         print(random.randint(MIN, MAX))
18
19         # Do another roll of the dice?
20         again = input('Roll them again? (y = yes): ')
21
22 # Call the main function.
23 main()
```

```
Rolling the dice . . .
Their values are:
3
1
Roll them again? (y = yes): y
Rolling the dice . . .
Their values are:
1
1
Roll them again? (y = yes): y
Rolling the dice . . .
Their values are:
5
6
Roll them again? (y = yes): y
```