

Test-topics

April 15, 2018

In [7]:

15.59

In [16]: *# Write a functeion that takes in a list of sides of a shape, and returns the perimeter*

#for every item in the sides list, add them together

```
def calc_perimeter(side_list):  
    # for every side in list of sides, i = side  
    total = 0  
    for side in side_list:  
        total += side  
    return total
```

```
def main():  
    sides=[3,5,8]  
    perimeter = calc_perimeter(sides)  
    print(perimeter)
```

```
main()
```

Print out the perimeter in main()

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In [20]: *# Create a function that takes in base and height of a triangle, and returns the area*

Call the area function from your main(), store the return variable, and print it

```
def calc_area(base, height):  
    tri_area = base * height//2
```

```

        return tri_area

def main():
    base = 12
    height = 4
    tri_area = calc_area(base, height)
    print (tri_area)

main()

```

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```

In [ ]: def my_function(xyz):
        # xyz = value = 5
        return xyz # return 5

def main():
    value = 5
    retval = my_function(value) # retval = 5
    print(retval) # print(5)

```

```

In [21]: def square(number):
        squared_number = number*number
        return squared_number

def main():
    num1 = square(7)
    num2 = square(5)

    value = 3
    num3 = square(value)

    print("7 squared is: ", num1)
    print("5 squared is: ", num2)
    print("3 squared is: ", num3)

main()

```

```

7 squared is:  49
5 squared is:  25
3 squared is:  9

```

```

In [22]: # Write a function called "seven()" that takes no arguments, and just returns 7

def seven():
    return 7

```

```
def main():
    answer = seven()
    print(answer)

main()
# Call the seven function from main and print its return value
```

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In [25]: # Write a function "plus_one()" that takes in a number, and returns that number+1

Call in main and print it

```
def plus_one(number):
    return number+1

def main():
    answer = plus_one(12)
    print (answer)

main()
```

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In [26]: # Write a function "times_ten()" that takes in a number, and returns that number*10

Call in main and print it

```
def times_ten(number):
    return number*10

def main():
    answer = times_ten(2)
    print (answer)

main()
```

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In [28]: # Write a function "product()" that takes in 2 numbers and returns the product

Call in main and print it

```
def product(num1,num2):
    return num1*num2

def main():
    answer = product(3,6)
    print (answer)
main()
```

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In [31]: *# Write a function "list_product()" that takes in a list of numbers and returns the product*
Call in main and print it

```
def list_product(numbers):
    total=1
    for num in numbers:
        total*=num
    return total

def main():
    numbers=[1,2,4,3,5]
    product = list_product(numbers)
    print (product)
main()
```

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