Papers Dock

PYTHON

9618

FUNCTIONS

What are Functions?



What are Functions?

A function is basically a block of code which only runs when it is called and you can pass data into the function which are know as "Parameters"

Syntax Of Function

def name ():
 print("Hello")

Calling A Function



```
def name():
    print("Hello")
name(
name()
name()
```

Hello Hello Hello

Question

Create a greeting function

Eg: Hello Taha

```
def greeting(name):
    print("Hello" + " " + name
greeting("Taha")
greeting("Sam")
```

Hello Taha

Hello Sam

Create a function for average in which take sum and count as parameters

```
def average(sum, count):
    avg = sum/count
    return avg
ans = average(500, 20)
print(ans)
```

Create a function to display the table of the number which is passed as perimeter

```
def table(num):
    for x in range(11):
        ans = num * x
        text = str(num) + " " + "x" + " " + str(x) + " " + "=" + " " + str(ans)
        print(text)

table(2)
```

```
2 \times 0 = 0
```

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

Create a function for finding the largest value in an array and then print the table of that number

Number = [45, 34, 23, 87, 96, 23]

```
Number = [45, 34, 23, 87, 96, 23]
def table(num):
    for x in range(11):
        ans = num * x
        text = str(num) + " " + "x" + " " + str(x) + " " + "=" + " " + str(ans)
        print(text)
def large(array):
    largenum = 0
    for x in range(len(array)):
        if array[x] >largenum:
            largenum = array[x]
    return largenum
temp = large(Number)
table(temp)
```

Linear Search Function
pass an array as parameter and string
value which you are suppose to find

```
name = ["Taha", "Ahmed", "Qasim"]
Jdef linearsearch(array, find):
    for x in range(len(array)):
        if array[x] == find:
            return x
index = linearsearch(name, "Ahmed")
print(index)
index2 = linearsearch(name, "Qasim")
print(index2)
index3 = linearsearch(name, "bano")
print(index3)
```

