

## Day3: ¶

Functions()

Arguments

global ,local

Recursion

return concept

Random

In [1]:

```
#https://www.hackerrank.com/challenges/write-a-function/problem
```

In [ ]:

From a function's perspective:

A parameter **is** the variable listed inside the parentheses **in** the function definition.

An argument **is** the value that **is** sent to the function when it **is** called.

In [ ]:

Information can be passed into functions **as** arguments.

Arguments are specified after the function name, inside the parentheses. You can add **as** many arguments **as** you want, just separate them **with** a comma.

In [30]:

```
def calculate_sum(data1, data2): #function definition
    #All the statements in the block of code must have the same level of indentation
    result_sum=data1+data2
    return result_sum

result=calculate_sum(10,20) #function call
print(result)
```

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In [86]:

```
from random import randint as n
x=1
y=5
for i in range(5):
    print(n(x,y))
```

2  
4  
3  
4  
3

In [82]:

```
a=10
b=20
s=a+b
k=a*s
print(k)
l=b/a
print(l)
```

```
300
2.0
```

In [ ]:

```
simantic error and syntatic error
```

In [21]:

```
def sum(b,c):
    s=b+c
    return s
```

```
a=10
b=20
c=sum(a,b)
print(c)
```

```
30
10
```

In [26]:

```
#without return
def subtract(b,c):
    d=b-c
    print(d)
a=10
b=20
subtract(b,a)
```

```
10
```

In [27]:

```
#use of function inside print
def subtract(b,c):
    d=b-c
    return d
a=10
b=20
print(subtract(b,a))
```

```
10
```

In [28]:

```
def sum(b,c):  
    s=b+c  
    return s  
  
a=10  
b=20  
  
if sum(a,b)>100:  
    print("yes")  
else:  
    print("No")
```

No

In [29]:

```
def repeat(a):  
    a+=1  
    if a>10:  
        return a  
    else:  
        return repeat(a)  
  
a=0  
c=repeat(a)  
print(c)
```

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In [37]:

```
#positional arg  
def sum(a,b,c):  
    return a+b+c  
a,b=10,20  
print(sum(a,b,0))
```

30

In [43]:

```
#variable arg  
def sum(a,b,*args):  
    c=a+b  
    for i in args:  
        c+=i  
    return c  
a,b=10,20  
print(sum(a,b,25,35))
```

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In [51]:

```
#default
def sum(b,a,c=10):
    c=a+b+c

    return c
a,b=10,20
c=30
print(sum(a,b))
```

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In [59]:

```
#keyword
def sum(a,b,c):
    d=a+b
    e=b-c

    return d
a,b=10,20
c=30
print(sum(a=b,b=c,c=a))
```

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In [68]:

```
a=10
def check(a):
    b=10

print(b)
```

20

In [ ]:

```
import random
import itertools
```

In [87]:

```
#help("random")
```

In [ ]:

```
1)x%4:
    x%100!=0 or x%400==0
```