1806554 Python Assignment 3 Homework

In [28]:

```
def avg(a,b,c):
    return (a+b+c)/3
x = int(input())
y = int(input())
z = int(input())
avg(x,y,z)
```

```
3
4
5
```

```
4.0
```

In [2]:

```
def fact():
    x = int(input())
    fact = 1
    for i in range(1,x+1):
        fact *= i
    print(fact)
fact()
```

```
5
120
```

In [8]:

```
import math
def hl(a,b):
    gcd = math.gcd(a,b)
    lcm = (a*b)/gcd
    return lcm,gcd
a = int(input())
b = int(input())
lcm,hcf = hl(a,b)
print(f'lcm : {lcm}   hcf : {hcf}')
```

```
100
5
lcm : 100.0   hcf : 5
```

In [13]:

```
def addSum(a):
    if a == 0:
        return 0
    return a + addSum(a-1)
a = int(input())
addSum(a)
```

```
150
```

```
11325
```

In [26]:

```
rev = 0
p = 1
def reverse(n):
    global rev
    global p
    if(n > 0):
        reverse(n//10)
        rev += (n % 10) * p
        p *= 10
    return rev
n = int(input())
reverse(n)
```

```
199
```

```
991
```

In [30]:

```
def SI(p,t,r):  # default R
    return (p * t * r)/100
p = int(input())
t = int(input())
SI(p,t,r = 100)
```

```
120
100
```

```
12000.0
```

In [89]:

```
ans = ''
def dtob(n):
    global ans
    if(n>0):
        dtob(n>>1)
        if(n&1):
            ans += '1'
        else:
            ans += '0'
    return ans
n = int(input())
print(f'binary of decimal {n} is {dtob(n)}')

```

```
100
binary of decimal 100 is 1100100
```

In [33]:

```
def fact(n):
    if(n==0):
        return 1
    return n*fact(n-1)
n = int(input())
fact(n)
```

```
5
```

```
120
```

In [36]:

```
def SerSum(n):
    if n==0:
        return 0
    return n**2 + SerSum(n-1)
n = int(input())
SerSum(n)
```

```
4
```

```
30
```

In [83]:

```
import numpy as np
def func():
    x = input()
    summ = 0
    x = [int(i) for i in x.split(' ')]
    for i in x:
        summ = summ + i
    avg = summ/len(x)
    print(f'sum = {summ} avg = {avg} std = {np.std
func()
```

```
1 2 3 4 5
sum = 15 avg = 3.0 std = 1.4142135623730951
```