Assignment - 4

1A.

```
import math
math.factorial(9)
```

2A.

```
n=9
for i in range(1,10):
   print(n,' * ',i,' = ',n*i)
```

3A.

```
def Fibonacci(n):
   if n<0:
      print("Incorrect input")
   # First Fibonacci number is 0
   elif n==0:
      return 0
   # Second Fibonacci number is 1
   elif n==1:
      return 1
   else:
      return Fibonacci(n-1)+Fibonacci(n-2)

print(Fibonacci(9))
```

4A.

```
num = int(input("Enter a number: "))
```

```
sum = 0


temp = num
while temp > 0:
    digit = temp % 10
    sum += digit ** 3
    temp //= 10


if num == sum:
    print(num,"is an Armstrong number")
else:
    print(num,"is not an Armstrong number")
```

5A.

```
lower = int(input("Enter lower range: "))
upper = int(input("Enter upper range: "))


for num in range(lower,upper + 1):
    sum = 0
    temp = num
    while temp > 0:
        digit = temp % 10
        sum += digit ** 3
        temp //= 10
```

```
        if num == sum:
            print(num)
```

6A.

```
num = 16


if num < 0:
   print("Enter a positive number")
else:
   sum = 0
  # use while loop to iterate until zero
   while(num > 0):
      sum += num
      num -= 1
   print("The sum is", sum)
```