

1. Write a python script to calculate sum of first N natural numbers.

```
n=int(input("Enter value of n: "))
count=0
for x in range(1,n+1):
    count=count+x;
print(count)
```

2. Write a python script to calculate sum of squares of first N natural numbers.

```
n=int(input("Enter value of n: "))
count=0
for x in range(1,n+1):
    square=x*x
    count=count+square;
print(count)
```

3. Write a python script to calculate sum of cubes of first N natural numbers.

```
n=int(input("Enter value of n: "))
count=0
for x in range(1,n+1):
    square=x*x*x
    count=count+square;
print(count)
```

4. Write a python script to calculate sum of first N odd natural numbers.

```
n=int(input("Enter value of n: "))
i=0
```

```
sum=0
count=1
while(n>i):
    sum=sum+count
    count=count+2
    i=i+1
print(sum)
```

5. Write a python script to calculate sum of first N even natural numbers.

```
n=int(input("Enter value of n: "))
i=0
sum=0
count=2
while(n>i):
    sum=sum+count
    count=count+2
    i=i+1
print(sum)
```

6. Write a python script to calculate factorial of a given number.

```
n=int(input("Enter value of n: "))
count=1
i=1
for x in range(i,n+1):
    count=count*x;
print(count)
```

7. Write a python script to count digits in a given number.

```
n=int(input("Enter value of n: "))
count=0
while(n>0):
    count=count+1
    n=n//10
print(count)
```

8. Write a python script to calculate sum of digits of a given number.

```
n=int(input("Enter value of n: "))
count=0
while(n>0):
    s=n%10
    n=n//10
    count=count+s
print(count)
```

9. Write a python script to print binary equivalent of a given decimal number. (do not use bin() method).

```
print("Enter the Decimal Number: ")
dnum = int(input())
i = 0
bnum = []
while dnum!=0:
    rem = dnum%2
    bnum.insert(i, rem)
    i = i+1
    dnum = int(dnum/2)
```

```

i = i-1
print("\nEquivalent Binary Value is:")
while i>=0:
    print(end=str(bnum[i]))
    i = i-1
print()

```

10. Write a python script to print the octal equivalent of a given decimal number. (do not use oct() method).

```

print("Enter the Decimal Number: ")
decnum = int(input())

i = 0
octnum = []
while decnum!=0:
    rem = decnum%8
    octnum.insert(i, rem)
    i = i+1
    decnum = int(decnum/8)

print("\nEquivalent Octal Value is: ")
i = i-1
while i>=0:
    print(octnum[i], end="")
    i = i-1
print()

```