

#1

```
num=input("Enter a Number :")
if num==num[::-1]:
    print(f"{num} is a Palindrome")
else:
    print(f"{num} is not a palindrome")
```

#2

```
import math
n1=int(input("Enter a number : "))
n2=int(input("Enter a number : "))
sum=1
for x in range(1,n2+1):
    term=(n1**x)/(math.factorial(x))
    sum+=term
print(f"Sum of series : ",sum)
```

#3

```
number=int(input("Enter a number : "))
product=1
while number>0:
    a=number%10
    product=product*a
    number=number//10
print(f"Product of digits : ",product)
```

#4

```
no=int(input("Enter a number : "))
factorial=1
for i in range(1,no+1):
    factorial*=i
print(f"Factorial of a number : ",factorial)
```

#5

```
num=int(input("Enter a number : "))
for a in range(2,num//2):
```

```
if num%a==0:
    print("Not a prime")
    break
else:
    print("Prime number")
```

```
#6
5
6
7
8
```

```
#7
P
y
t
h
o
n
```

```
#8
P ?$
y ?$
t ?$
h ?$
o ?$
n ?$
```

```
#9
64
121
196
289
400
```

```
#10
digit=int(input("Enter a number : "))
for x in range(1,digit+1):
    for y in range(1,x+1):
        print(y,end=" ")
```

```
print()
```

```
#11
```

```
for i in range(100,501):
```

```
    if number%11==0 and number%2!=0:
```

```
        print(i)
```