1.

```
print("Enter two numbers")
a=int(input())
b=int(input())
print("addition of %d and %d is %d"%(a,b,a+b))
```

2.

```
weekday = int(input("Enter weekday day number (1-7) : "))

if weekday == 1 :
   print("\nMonday");

elif weekday == 2 :
   print("\nTuesday")

elif(weekday == 3) :
   print("\nWednesday")

elif(weekday == 4) :
   print("\nThursday")

elif(weekday == 5) :
   print("\nFriday")

elif(weekday == 6) :
   print("\nSaturday")

elif (weekday == 7) :
   print("\nSunday")

else :
   print("\nPlease enter weekday number between 1-7.")
```

3.

```
import math
a=float(input("Enter a number : "))
print("square root of ",a,"is",math.sqrt(a))
```

4.

```
l=float(input("enter length: "))
b=float(input("enter breadth: "))
a=float(l*b)
print("Area : ",a)
```

5.

```
x=float(input("Enter side length: "))
area=float(x**2)
```

```
perimeter=float(4*x)
print("Area=",area,"\nPerimeter=",perimeter)
```

6.

```
import math
r=float(input("Enter radius:"))
h=float(input("Enter height:"))
vol=math.pi * r**2 * h
area=(2*math.pi * r * h) + (2*math.pi * r**2)
print("Volume: ",vol,"\nArea: ",area)
```

7.

```
def swap(a,b):
    t=a
    a=b
    b=t
    print("swapped values are a=",a,"and b=",b)

a=int(input("Enter a:"))
b=int(input("Enter b:"))
swap(a,b)
```

8.

```
import math

a=int(input("Enter a number: "))
if(a<=0):
    print("it is neither even nor odd")
else:
    if(a%2==0):
        print(a,"is even")
    else:
        print(a,"is odd")
```

9.

```
print("Enter three numbers:")
a,b,c=int(input()),int(input()),int(input())

if(a>=b and a>=c):
    print(a,"is the greatest of all")
elif(b>=a and b>=c):
    print(b,"is greatest of all")
else:
    print(c,"is greatest of all")
```

10.

```
import calendar
x=int(input("Enter year:"))
```

```
if(calendar.isleap(x)==True):
    print(x,"is a leap year")
else:
    print(x,"is not a leap year")
```

11.

```
a=int(input("Enter a number: "))
if a==0:
    print("It is 0")
elif a>0:
    print("It is positive")
else:
    print("It is negative")
```

12.

```
print("---Enter marks---")
a,b,c,d,e=float(input()),float(input()),float(input()),float(input()),float(input())
avg=(a+b+c+d+e)/5
print("Average:",avg)
if(avg>=90.0):
    print("Grade A")
elif(avg>=80 and avg<90):
    print("Grade B")
elif(avg>=70 and avg<80):
    print("Grade C")
elif(avg>=60 and avg<70):
    print("Grade D")
elif(avg>=50 and avg<60):
    print("Grade E")
else:
    print("Grade F")
```

13.

```
#a
print("--pattern 1--")
for i in range(5):
    for j in range(i):
        print("*",end="")
    print()

#b
print("--pattern 2--")
for i in range(1,6,2):
    for j in range(i):
        print("*",end="")
    print()
i-=1
while i > 0:
    if i%2!=0:
        for j in reversed(range(i)):
            print("*",end="")
        print()
```

```
    i-=1
```

14.

```
i=1
while i<=100:
    if(i%2==0):
        print(i,end=" ")
    i+=1
```

15.

```
sum=0
for i in range(11):
    sum+=i
print(sum)
```

16.

```
n1,n2,cnt=0,1,0
n=int(input("Enter how many terms: "))
if n<=0:
    print("--")
if n==1:
    print(n1)
if n>=2:
    while cnt<n:
        print(n1)
        seq=n1+n2
        n1=n2
        n2=seq
        cnt+=1
```

17.

```
n=int(input("Enter a number: "))
ans=1
for i in range(1,n+1):
    ans=ans*i
print("Factorial is : ",ans)
```

18.

```
n=int(input("Enter a number: "))
ans=0
while n>0:
    d=n%10
    ans+=d
    n//=10
print("sum of digots is",int(ans))
```

19.

```
num = int(input("Enter a number:"))
rev = 0

while num != 0:
    d = num % 10
    rev = rev * 10 + d
    num //= 10

print("Reversed Number: " + str(rev))
```

20.

```
num=int(input("Enter a number:"))
temp=num
rev=0
while(num>0):
    dig=num%10
    rev=rev*10+dig
    num=num//10
if(temp==rev):
    print("The number is palindrome!")
else:
    print("Not a palindrome!")
```

21.

```
n = int(input("Enter any number: "))
sum1 = 0
for i in range(1, n):
    if(n % i == 0):
        sum1 = sum1 + i
if (sum1 == n):
    print("The number is a Perfect number!")
else:
    print("The number is not a Perfect number!")
```