01) WAP to print “Hello World”

```
print("Hello World")
```

```
Hello World
```

02) WAP to print addition of two numbers with and without using input().

```
# without input function
n1 = 30
n2 = 20
ans = n1 + n2
print("Addition is:",ans)
```

```
Addition is: 50
```

```
# with input function
n1 = int(input("Enter 1st Number:"))
n2 = int(input("Enter 2nd Number:"))
ans = n1 + n2
print("Addition is:",ans)
```

```
Enter 1st Number: 12
Enter 2nd Number: 12
```

```
Addition is: 24
```

03) WAP to check the type of the variable.

```
a = "Parth"
b = 563
print(type(a))
print(a)
print(type(b))
print(b)
```

```
<class 'str'>
Parth
<class 'int'>
563
```

04) WAP to calculate simple interest.

```
p = int(input("Enter principle:"))
t = int(input("Enter time period:"))
r = int(input("Enter rate of interest:"))
print('The principal is', p)
```

```
print('The time period is', t)
print('The rate of interest is',r)
si = (p * t * r)/100
print("Simple interest is : ",si)
```

```
Enter principle: 10000
Enter time period: 5
Enter rate of interest: 5

The principal is 10000
The time period is 5
The rate of interest is 5
Simple interest is :  2500.0
```

05) WAP to calculate area and perimeter of a circle.

```
radius = float(input("Enter the radius of the circle:"))
area = 3.14 * radius * radius
print("Area of circle is:",area)
```

```
Enter the radius of the circle: 23

Area of circle is: 1661.06
```

06) WAP to calculate area of a triangle.

```
s1 = int(input("Enter 1st side:"))
s2 = int(input("Enter 2nd side:"))
s3 = int(input("Enter 3rd side:"))
s = (s1+s2+s3) / 2
area = ((s*(s-s1)*(s-s2)*(s-s3))**0.5)
print("The area of the triangle is: ",area)
```

```
Enter 1st side: 7
Enter 2nd side: 8
Enter 3rd side: 9

The area of the triangle is:  26.832815729997478
```

08) WAP to convert degree into Fahrenheit and vice versa.

```
celsius = float(input("Enter degree in celsius:"))
fahrenheit = (celsius * 1.8) + 32
print("Fahrenheit is:",fahrenheit)
```

```
Enter degree in celsius: 40

Fahrenheit is: 104.0
```

09) WAP to find the distance between two points in 2-D space.

```
x1 = float(input("Enter x-coordinate of the first point: "))
y1 = float(input("Enter y-coordinate of the first point: "))

x2 = float(input("Enter x-coordinate of the second point: "))
y2 = float(input("Enter y-coordinate of the second point: "))

distance = ((x2 - x1) ** 2 + (y2 - y1) ** 2) ** 0.5

print(f"The distance between the two points is: {distance}")
```

```
Enter x-coordinate of the first point:  3
Enter y-coordinate of the first point:  4
Enter x-coordinate of the second point:  7
Enter y-coordinate of the second point:  1

The distance between the two points is: 5.0
```

10) WAP to print sum of n natural numbers.

```
n = int(input("Enter a positive integer: "))

if n < 1:
    print("Please enter a positive integer greater than 0.")
else:
    total = n * (n + 1) // 2

print(f"The sum of the first {n} natural numbers is: {total}")
```

```
Enter a positive integer:  6

The sum of the first 6 natural numbers is: 21
```

11) WAP to print sum of square of n natural numbers.

```
n = int(input("Enter a positive integer: "))

if n < 1:
    print("Please enter a positive integer greater than 0.")
else:
    sum_of_squares = n * (n + 1) * (2 * n + 1) // 6
print(f"The sum of squares of the first {n} natural numbers is:
{sum_of_squares}")
```

```
Enter a positive integer:  5

The sum of squares of the first 5 natural numbers is: 55
```

12) WAP to concate the first and last name of the student.

```
fname = input("Enter First Name:")
lname = input("Enter Second Name:")
print("Full Name is:",fname + lname)

Enter First Name: Parth
Enter Second Name: Patel

Full Name is: ParthPatel
```

13) WAP to swap two numbers.

```
num1 = int(input("Enter the first number (a): "))
num2 = int(input("Enter the second number (b): "))

print(f"Before swapping: num1 = {num1}, num2 = {num2}")

temp = num1
num1 = num2
num2 = temp

print(f"After swapping: num1 = {num1}, num2 = {num2}")

Enter the first number (a):  63
Enter the second number (b):  89

Before swapping: num1 = 63, num2 = 89
After swapping: num1 = 89, num2 = 63
```

14) WAP to get the distance from user into kilometer, and convert it into meter, feet, inches and centimeter.

```
kilometers = float(input("Enter the distance in kilometers: "))

meters = kilometers * 1000
feet = kilometers * 3280.84
inches = kilometers * 39370.1
centimeters = kilometers * 100000

print(f"The distance in meters is: {meters:.2f} m")
print(f"The distance in feet is: {feet:.2f} ft")
print(f"The distance in inches is: {inches:.2f} in")
print(f"The distance in centimeters is: {centimeters:.2f} cm")

Enter the distance in kilometers:  1.5

The distance in meters is: 1500.00 m
The distance in feet is: 4921.26 ft
The distance in inches is: 59055.15 in
The distance in centimeters is: 150000.00 cm
```

15) WAP to get day, month and year from the user and print the date in the given format: 23-11-2024.

```
day = input("Enter day:")
month = input("Enter month:")
year = input("Enter year:")
print(day,month,year, sep="-")
```

```
Enter day: 16
Enter month: 11
Enter year: 2005

16-11-2005
```