1)write a python program eligible for voting

```
age = int(input("Enter your age: "))
if age >= 18:
   print("You are eligible to vote.")
else:
   print("You are not eligible to vote yet.")
```

2)write a python program for leapyear or not

```
year = int(input("Enter a year: "))
if year % 4 == 0:
   if year % 100 == 0:
      if year % 400 == 0:
         print(year, "is a leap year.")
      else:
         print(year, "is not a leap year.")
   else:
      print(year, "is a leap year.")
else:
   print(year, "is not a leap year.")
```

3)write a python program greatest number for 3 in array

```
arr = []
for i in range(3):
   arr.append(int(input("Enter number {}: ".format(i+1))))
max_num = max(arr)
print("The greatest number in the array is:", max_num)
```

4)write a python program for celsius to Fahrenheit

```
celsius = float(input("Enter temperature in Celsius: "))
fahrenheit = (celsius * 9/5) + 32
print("Temperature in Fahrenheit: ", fahrenheit)
```

5)write a python program for area of circle

```
import math

radius = float(input("Enter the radius of the circle: "))
area = math.pi * (radius ** 2)
print("The area of the circle is:", area)
```

6)write a python program for quadratic equation

```
import math

a = float(input("Enter the value of coefficient a: "))
b = float(input("Enter the value of coefficient b: "))
c = float(input("Enter the value of coefficient c: "))

# Calculate discriminant
discriminant = b**2 - 4*a*c

if discriminant > 0:
    # Two real roots
    root1 = (-b + math.sqrt(discriminant)) / (2*a)
    root2 = (-b - math.sqrt(discriminant)) / (2*a)
    print("The roots are", root1, "and", root2)
elif discriminant == 0:
    # One real root
    root = -b / (2*a)
    print("The root is", root)
else:
    # Two complex roots
    real_part = -b / (2*a)
    imaginary_part = math.sqrt(abs(discriminant)) / (2*a)
    print("The roots are", real_part, "+", imaginary_part, "i and", real_part, "-", imaginary_part, "i")
```

7)write a python program average mark of student

```
num_subjects = int(input("Enter the number of subjects: "))
marks = []
for i in range(num_subjects):
    marks.append(float(input("Enter the marks for subject {}: ".format(i+1))))
average = sum(marks) / num_subjects
print("The average marks of the student is:", average)
```

8)write a python program for first 10 natural numbers using while loop

```
i = 1
while i <= 10:
    print(i)
    i += 1
```

9)write a python program for the sum of all 1 to 10 numbers

```
sum = 0
for i in range(1, 11):
    sum += i
print("The sum of all the numbers from 1 to 10 is:", sum)
```

10)write a python program for multiplication table

```
num = int(input("Enter a number: "))
print("Multiplication table for", num)
for i in range(1, 11):
    print(num, "x", i, "=", num*i)
```

11)write a python program for print the list [50,40,30,10]

```
my_list = [50, 40, 30, 10]
print(my_list)
```

12)write a python program for prime number between 25 and 50

```
for num in range(25, 51):
    if all(num % i != 0 for i in range(2, int(num ** 0.5) + 1)):
        print(num, end=" ")
```