

Program 1

```
print("Hola Mundo");
```

Program 2

```
def circle(radius):  
    print("The perimeter circle is",2*3.14*radius)  
    print("The area of circle is",3.14*radius*radius)
```

```
def square(length):  
    print("The perimeter of the square is",4*length)  
    print("The area of the square is",length*length)
```

```
def rectangle(length,breath):  
    print("The perimeter of the rectangle  
is",2*length*breath)  
    print("The area of the rectangle  
is",length*breath);
```

```
circle(int(input("enter the radius of the circle")))  
square(int(input("enter the length of the square")))  
rectangle(int(input("enter the length of the  
rectangle")),int(input("enter the breadth of the  
rectangle")))
```

Program 3

```
a = int(input("enter first element "))  
b = int(input("enter the second element "))  
c = int(input("enter the third element "))  
print("The max element among the 3 element  
is",max(a,b,c))
```

Program 4

```
import cmath
```

```
a = 1  
b = 5
```

```

c = 6

# calculate the discriminant
d = (b**2) - (4*a*c)

# find two solutions
sol1 = (-b-cmath.sqrt(d))/(2*a)
sol2 = (-b+cmath.sqrt(d))/(2*a)

print('The solution are {0} and {1}'.format(sol1,sol2))

```

Program 4

```

a = int(input("Enter the number which has to be
checked whether it is prime or not"))
count = 0
for i in range(2,a):
    if a % i == 0:
        count += 1
if count > 0:
    print("Not prime")
else:
    print("Prime")

```

Program 5

```

lower = 0
upper = 1000

for num in range(lower, upper + 1):
    sum = 0
    temp = num
    while temp > 0:
        digit = temp % 10
        sum += digit ** 3
        temp //= 10
    if num == sum:
        print(num)

```

Program 6

```
a,b = [int(x) for x in input("enter no and power").split()]
temp = 1
for i in range(b):
    temp *= a
print("The output is",temp)
```

Program 7

```
list = []
for i in range(128):
    list.append((i,chr(i)))

print(list)
```

Program 8

```
def hcf(a, b):
    if(b == 0):
        return a
    else:
        return hcf(b, a % b)

a = int(input("Enter the first Number"))
b = int(input("Enter the second Number"))

print("The gcd of {0} and {1} is :".format(a,b),hcf(a,b))
```