1.
```
import datetime


datetime = datetime.datetime.now()


print(datetime)
```

2.
```
a = int(input('enter first number: '))
b = int(input('enter secound number: '))

sum = a + b

print(sum)
```

3.
```
first_num =int(input('enter first number: '))

secound_num =int(input('enter second number: '))

three_num = int(input('enter third number: '))

if int(first_num > secound_num and first_num > three_num):
    print(first_num)
elif int(secound_num > three_num):
    print(secound_num)
else:
    print(three_num)
```

4.
```
num = int(input("enter a number: "))

if num % 2 == 0:
    print("even number")
else:
    print("odd number")
```

5.
```
year = int(input("enter a year"))
if  year % 400 == 0  and year % 100 == 0:
    print("leap year")
elif year % 4 == 0 and year % 100 != 0:
    print("leap year")
else:
    print("not a leap year")
```

6.
```
celsius = float(input("Enter temperature in Celsius: "))
fahrenheit = (celsius * 9/5) + 32
print(fahrenheit)
```

```
7. original_string = input("Enter a string: ")

reversed_string = original_string[::-1]

print(reversed_string)
```

8.
```
word = input("Enter values: ")

reverse_str = word[::-1]

if word == reverse_str:
    print(f"{word} is a palindrome.")
else:
    print(f"{word} is not a palindrome.")
```

9.
```
num_list = [int(x) for x in input("Enter a list of numbers separated by
spaces: ").split()]

maximum = max(num_list)

print(f"The maximum element in the list is: {maximum}")
```

10.
```
numbers = [12, 45, 78, 23, 56, 89, 34, 67]

maximum_element = max(numbers)

print("The maximum element in the list is:", maximum_element)
```

```
11.def calculate_rectangle_area(length, width):
    area = length * width
    return area

length = float(input("Enter the length of the rectangle: "))
width = float(input("Enter the width of the rectangle: "))

area = calculate_rectangle_area(length, width)
print(area)
```

```
12.def check(number):
    if  number > 0:
        print("number is positive")
    elif number < 0:
        print("number is negative")
    else:
        print("number is zero")


num = int(input('enter a number'))

check(num)


13.def lis(l):
    x = 0
    for i in l:
        if i > x:
            z = i
        return z


a = [89,56,6,9,20]
p=lis(a)
print(p,"is the largest number")


14.def reverse(val):
    reverse_string = val[::-1]
    print(reverse_string)
    return reverse_string

num = input('enter a string: ')

reverse(num)

15.import random

def generate_random_number(min_value, max_value):
    if min_value > max_value:
        random_number = random.uniform(min_value, max_value)
        print(int(random_number))


a = int(input("enter the first number higher than secound number: "))
b = int(input("enter the secound number less than first number: "))


generate_random_number(a,b)
```

```
16.def dup():
    numbers = [12, 45, 78, 23, 56, 89, 34, 1000]
    s = sum(numbers)
    print(s)

dup()
```

```
17.len = int(input("enter the length: "))
user = []
print("enter the numbers")
for i in range(len):
    a = int(input(""))
    user.append(a)
def dup(lis):
    duplist = []
    duplist.append(lis[0])
    for i in lis:
        if i not in duplist:
            duplist.append(i)

    print("removed duplicate list=", duplist)
dup(user)
```

```
18.def is_list_empty():
    input_list = []
    if len(input_list) == 0:
        print('list is empty')
    else:
        print("list is not empty")

is_list_empty()
```

```
19.num = [2,4,6,8,10,12]
s = int(input('enter a number size:[2,4,6,8,10,12]=      '))

def ind():
    for i in range(len(num)):
        if s == num[i]:
            print(i)


ind()
```

```
20.lu = []
ul = []
size = int(input('enter the size: '))
```

```
print('enter the string: ')
for i in range(0,size):
    a = int(input(''))
    ul.append(a)
def sort_list_ascending(li):
    sorted_list = sorted(li)
    print(sorted_list)

sort_list_ascending(ul)

21.size1 = []
size2 = []
list1 = []
list2 = []
size = int(input('enter the size: '))
print('enter the list: ')

for i in range(0,size):
    a = int(input(''))
    list1.append(a)
sizes = int(input('enter the size: '))
print('enter the secound list: ')
for i in range(0,sizes):
     s = int(input(''))
     list2.append(s)


def merge_lists(list1,list2):
    merged_list = list1.copy()
    merged_list.extend(list2)
    print(merged_list)


22.size = []
listone = []
sl = int(input('enter the size: '))
ls = int(input('enter the list:'))
for i in range(1,sl):
    a = int(input(''))
    listone.append(a)
def calculate_average(numbers):
    if len(numbers) == 0:
        return None

    total = sum(numbers)
    average = total / len(numbers)
    print(average)

calculate_average(listone)
```

```
23.def contains_value():
    input_list = [12, 45, 78, 23, 56, 89, 34, 67]
    target = 23
    for item in input_list:
        if item == target:
            print('it is sepcfic value')
        else:
            print('it is not sepecfic value')

contains_value()
```

```
24.def reverse_list():
    input_list = [15,56,78,46]
    reversed_list = input_list[::-1]
    print(reversed_list)


reverse_list()
```

```
25.def remove_last_element():
    input_list = [12, 45, 78, 23, 56, 89, 34, 1000]
    if input_list:
        input_list = input_list[:-1]
    print(input_list)

remove_last_element()
```