Week 1

Q1. Write A Program to check if the entered number is odd or even

```python
a = int(input("Enter a number: "))

if a%2==0:
    print (a," is even")
else:
    print(a," is odd")
```
```
Enter a number: 45
45  is odd
```

Q2. Write A Program to check if the entered number is divisible by 7 or not

```python
a = int(input("Enter a number: "))

if a%7==0:
    print (a," is divisble by 7")
else:
    print(a," is not divisible by 7")
```
```
Enter a number: 56
56  is divisble by 7
```

Q3. Write A Program to identify the type of triangle from its side lengths

```python
a = float(input("Enter first side of the triangle: "))
b = float(input("Enter second side of the triangle: "))
c = float(input("Enter third side of the triangle: "))

if a==b==c:
    print("It is an equilateral triangle. ")

elif  a!=b and b!=c and c!=a:
    print("It is a scalene triangle")

else:
    print("It is an isosceles triangle")
```
```
Enter first side of the triangle: 5
Enter second side of the triangle: 7
Enter third side of the triangle: 5
It is an isosceles triangle
```

Q4. Write A Program to take a colour as input and print its traffic signal notation

```python
col = input ("Enter colour: ")

if col.lower()=='red':
    print("STOP")

elif col.lower()=='green':
    print('GO')

elif col.lower() == 'yellow':
    print("CAUTION")

else:
    print("Enter valid input!!!")
```
```
Enter colour: RED
STOP
```

Q5. Define a simple calculator to perform basic arithmetic operations

```python
def calc(a: int, op: str, b: int) :
    if op=='+':
        return a+b
    elif op=='-':
        return a-b
    elif op=='/':
        return a/b
    elif op=='*':
        return a*b
    elif op=='//':
        return a//b
    elif op=='%':
        return a%b



a = int(input('Enter first number: '))
op = input("Enter Operator: ")
b = int(input('Enter second number: '))

print(a,op,b,'=',calc(a,op,b),sep=" ")
```

```
Enter first number: 9
Enter Operator: /
Enter second number: 3
9 / 3 = 3.0
```

Q6. Write a Program to take marks as input and print the grades

```python
m = int(input("Enter marks: "))

if m>=90:
    print("Your grade is: A")
elif m>=70:
    print("Your grade is: B")
elif m>=50:
    print("Your grade is: C")
elif m>=35:
    print("Your grade is: D")
else:
    print("Your grade is: FAIL")
```

```
Enter marks: 94
Your grade is: A
```

Q7. Write a program to find the greatest of three numbers

```python
#Find greatest of 3
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
c = int(input("Enter third number: "))

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

```
Enter first number: 9
Enter second number: 13
Enter third number: 11
13  is the greatest.
```