Vaishnavi Ashok Patil
C07
SPP-II

Experiment no.:-5

1. **Write a program to check whether a given number is positive, negative, or zero.**

num = float(input("Enter a number: "))

if num > 0:

    print("The number is positive.")

elif num < 0:

    print("The number is negative.")

else:

    print("The number is zero.")

```
Enter a number: 2
The number is positive.
```

2. **Write a program to check whether a given number is even or odd.**
```
num = int(input("Enter a number: "))
if num % 2 == 0:
    print("The number is even.")
else:
    print("The number is odd.")
```
```
Enter a number: 4
The number is even.
```

3. **Write a program to check whether a given character is a vowel or consonant.**

ch = input("Enter a character: ")

if ch.lower() in ['a', 'e', 'i', 'o', 'u']:

    print("The character is a vowel.")

else:

    print("The character is a consonant.")

```
Enter a character: M
The character is a consonant.
```

4. **Write a program to check whether a given number is divisible by 5 and 11.**

num = int(input("Enter a number: "))
if num % 5 == 0 and num % 11 == 0:
    print("The number is divisible by both 5 and 11.")
else:

```
   print("The number is not divisible by both 5 and 11.")
```

```
Enter a number: 54
The number is not divisible by both 5 and 11.
```

5. Write a program to check whether a given triangle is valid (sum of any two sides greater

```
a = float(input("Enter first side: "))

b = float(input("Enter second side: "))

c = float(input("Enter third side: "))

if a + b > c and a + c > b and b + c > a:

    print("The triangle is valid.")

else:

    print("The triangle is not valid.")
```

```
Enter first side: 4
Enter second side: 5
Enter third side: 6
The triangle is valid.
```

6. Write a program to check whether a person is eligible to vote (age ≥ 18).

```
age = int(input("Enter your age: "))


if age >= 18:
    print("You are eligible to vote.")
else:
    print("You are not eligible to vote.")
```

```
Enter your age: 20
You are eligible to vote.
```

7. Write a program to calculate the grade of a student based on marks (A: ≥ 90, B: 75–89, C: 50–74, F:

```
marks = float(input("Enter your marks: "))
if marks >= 90:
    print("Grade: A")
elif marks >= 75:
    print("Grade: B")
elif marks >= 50:
    print("Grade: C")
else:
```

```
    print("Grade: F")
```

```
Enter your marks: 85
Grade: B
```

8.   **Write a program to check whether a given number is a multiple of 3 or 7.**

num = int(input("Enter a number: "))

if num % 3 == 0 or num % 7 == 0:

    print("The number is a multiple of 3 or 7.")

else:

    print("The number is not a multiple of 3 or 7.")

```
Enter a number: 28
The number is a multiple of 3 or 7.
```

9.   **Write a program to check whether a given year is a century year (divisible by 100).**

year = int(input("Enter a year: "))

if year % 100 == 0:

    print("It is a century year.")

else:

    print("It is not a century year.")

```
Enter a year: 2025
It is not a century year.
```

10.   **Write a program to check whether a given temperature is hot, warm, or cold (hot: >35°C, warm: 20–35°C, cold: <20°C). def check_temperature():**

temp = float(input("Enter temperature in °C: "))

if temp > 35:

    print("It's hot.")

elif temp >= 20:

    print("It's warm.")

else:

    print("It's cold.")

```
Enter temperature in °C: 96
It's hot.
```