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Task 1: Write a program to find maximum between two numbers.

In [1]:
```
num1 = float(input("Enter the first number: "))
num2 = float(input("Enter the second number: "))

max_num = max(num1, num2)

print("Maximum number:", max_num)


```

```
Enter the first number: 55
Enter the second number: 66
Maximum number: 66.0
```

Task 2: Write a program to find maximum between three numbers.

In [ ]:
```
num1 = float(input("Enter the first number: "))
num2 = float(input("Enter the second number: "))
num3 = float(input("Enter the third number: "))

max_num = max(num1, num2, num3)

print("Maximum number:", max_num)

```

Task 3: Write a program to check whether a number is negative, positive or zero.

In [2]:
```
num = float(input("Enter a number: "))

if num > 0:
    print("Positive number")
elif num < 0:
    print("Negative number")
else:
    print("Zero")

```

```
Enter a number: 4
Positive number
```

Task 4: Write a program to check whether a number is divisible by 5 and 11 or not.

In [3]:
```
num = int(input("Enter a number: "))

if num % 5 == 0 and num % 11 == 0:
    print("Divisible by 5 and 11")
else:
    print("Not divisible by 5 and 11")

```

```
Enter a number: 3
Not divisible by 5 and 11
```

Task 5: Write a program to check whether a number is even or odd.

In [4]:
```
num = int(input("Enter a number: "))

if num % 2 == 0:
    print("Even number")
else:
    print("Odd number")

```

```
Enter a number: 55
Odd number
```

Task 6: Write a program to input any alphabet and check whether it is vowel or not.

In [5]:
```
alphabet = input("Enter an alphabet: ").lower()

if alphabet in ['a', 'e', 'i', 'o', 'u']:
    print("Vowel")
else:
    print("Not a vowel")

```

```
Enter an alphabet: e
Vowel
```

Task 7: Write a program to input day number of a month (31 days) and print the number of week (1,2,3,4).

In [6]:
```
day_number = int(input("Enter the day number of the month (1-31): "))

week_number = (day_number - 1) // 7 + 1

print("Week number:", week_number)

```

```
Enter the day number of the month (1-31): 4
Week number: 1
```

Task 8: Write a program to input month number and print number of days in that month.

In [7]:
```
month = int(input("Enter the month number (1-12): "))

if month in [1, 3, 5, 7, 8, 10, 12]:
    print("Number of days: 31")
elif month in [4, 6, 9, 11]:
    print("Number of days: 30")
elif month == 2:
    print("Number of days: 28 or 29")
else:
    print("Invalid month number")

```

```
Enter the month number (1-12): 3
Number of days: 31
```

Task 9: Write a program to give the name of the day when given the number of day in a week.

In [8]:
```
day_number = int(input("Enter the day number (1-7): "))

days = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"

if day_number in range(1, 8):
    print("Day:", days[day_number - 1])
else:
    print("Invalid day number")

```

```
Enter the day number (1-7): 6
Day: Saturday
```

Write a program to input marks (out of 100 each) of five subjects Physics, Chemistry,Biology, Mathematics and Computer.

Calculate percentage and grade of each subject according to following:

Percentage >= 90% : Grade A Percentage >= 80% : Grade B Percentage >= 70% : Grade C Percentage >= 60% : Grade D Percentage >= 40% : Grade E Percentage < 40% : Grade F

In [9]:
```
physics = float(input("Enter marks for Physics: "))
chemistry = float(input("Enter marks for Chemistry: "))
biology = float(input("Enter marks for Biology: "))
mathematics = float(input("Enter marks for Mathematics: "))
computer = float(input("Enter marks for Computer: "))

total_marks = 500
obtained_marks = physics + chemistry + biology + mathematics + computer
percentage = (obtained_marks / total_marks) * 100

if percentage >= 90:
    grade = "A"
elif percentage >= 80:
    grade = "B"
elif percentage >= 70:
    grade = "C"
elif percentage >= 60:
    grade = "D"
elif percentage >= 40:
    grade = "E"
else:
    grade = "F"

print("Percentage:", percentage)
print("Grade:", grade)

```

```
Enter marks for Physics: 78
Enter marks for Chemistry: 99
Enter marks for Biology: 98
Enter marks for Mathematics: 98
Enter marks for Computer: 98
Percentage: 94.19999999999999
Grade: A
```

Task 11: Write a program to input electricity unit charges and calculate total electricity bill

according to the given condition: For first 50 units Rs. 0.50/unit For next 100 units (i.e., 51 to 150) Rs. 0.75/unit For next 100 units (i.e., 151 to 250) Rs. 1.20/unit For units above 250 Rs. 1.50/unit An additional surcharge of 20% is added to the bill

In [11]:

```
units = int(input("Enter the electricity units consumed: "))

total_bill = 0

if units <= 50:
    total_bill = units * 0.50
elif units <= 150:
    total_bill = 50 * 0.50 + (units - 50) * 0.75
elif units <= 250:
    total_bill = 50 * 0.50 + 100 * 0.75 + (units - 150) * 1.20
else:
    total_bill = 50 * 0.50 + 100 * 0.75 + 100 * 1.20 + (units - 250) * 1.5

total_bill += total_bill * 0.20  # Add 20% surcharge

print("Total electricity bill: Rs.", total_bill)

```

```
Enter the electricity units consumed: 78
Total electricity bill: Rs. 55.2
```

In [ ]:

```
1
```