Tasks

Task 1: Write a program to find maximum between two numbers.
Task 2: Write a program to find maximum between three numbers.
Task 3: Write a program to check whether a number is negative, positive or zero.
Task 4: Write a program to check whether a number is divisible by 5 and 11 or not.
Task 5: Write a program to check whether a number is even or odd.
Task 6: Write a program to input any alphabet and check whether it is vowel or not.
Task 7: Write a program to input day number of a month (31 days) and print the number of week (1,2,3,4).
Task 8: Write a program to input month number and print number of days in that month.
Task 9: Write a program to give the name of the day when given the number of day in a week. e.g., User enters 1, answer comes "Monday" and son on to 7.
Task 10: 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
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

Task 1:

Write a program to find maximum between two numbers.

In [1]:
```
number = float(input("Number 1 = "))
number2 = float(input("Number 2 ="))

if number > number2:
    print(f"Number 1 is greater {number}")
elif number == number2:
    print("Numbers are equal")
else:
    print(f"Number2 are greater {number2}")
```

```
Number 1 = 12
Number 2 =1
Number 1 is greater 12.0
```

Task 2:

Write a program to find maximum between three numbers.

In [6]:
```
number1 = float(input("Number 1 = "))
number2 = float(input("Number 2 ="))
number3 = float(input("Number 3 ="))

num=[number1,number2,number3]
max_num = max(num)
print("Max number is",max_num)
```

```
Number 1 = 34
Number 2 =45
Number 3 =33
Max number is 45.0
```

Task 3:

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

In [11]:
```
num = float(input("input Number : "))

if num == 0:
    print("number is zero")
elif num > 0:
    print("number is positive")
else:
    print("number is negative")
```

```
input Number : -3
number is negative
```

Task 4:

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

In [15]:
```
num = float(input("input Number : "))

if num % 5 == 0 and num  % 11 == 0:
    print("the number is divisible by 5 and 11")
else:
    print("the number is not divisible by 5 and 11")
```

```
input Number : 15
the number is not divisible by 5 and 11
```

Task 5:

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

In [16]:
```
num = float(input("input Number : "))
if num % 2==0:
    print("even",num)
else:
    print("odd",odd)
```

```
input Number : 4
even 4.0
```

Task 6:

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

In [23]:
```
alpha = input("input Number : ")
alpha = alpha.lower()
if alpha == "a" or alpha == "e" or alpha == "i" or alpha == "o" or alpha == "u":
    print("the alphabet is vowel:",alpha)
else:
    print("the alphabet is not vowel:",alpha)
```

```
input Number : r
the alphabet is not vowel: r
```

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 [27]:
```
days = int(input("input Number : "))

weeks = days//7

print("weeks : ",weeks)
```

```
input Number : 31
weeks :  4
```

Task 8:

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

In [28]:
```
month = int(input("Enter month number (1-12): "))

if month == 2:
    print("Number of days: 28 or 29 (leap year)")
elif month in [4, 6, 9, 11]:
    print("Number of days: 30")
else:
    print("Number of days: 31")
```

```
Enter month number (1-12): 5
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.
e.g., User enters 1, answer comes "Monday" and son on to 7.

In [29]:
```
day_number = int(input("Enter day number (1-7): "))

days = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']

if day_number >= 1 and day_number <= 7:
    day_name = days[day_number - 1]
    print("Day name:", day_name)
else:
    print("Invalid day number. Please enter a number between 1 and 7.")
```

```
Enter day number (1-7): 4
Day name: Thursday
```

Task 10:

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 [31]:
```
physics_marks = int(input("Enter marks in Physics (out of 100): "))
chemistry_marks = int(input("Enter marks in Chemistry (out of 100): "))
biology_marks = int(input("Enter marks  in Biology (out of 100): "))
mathematics_marks = int(input("Enter marks in Mathematics (out of 100): "))
computer_marks = int(input("Enter marks in Computer (out of 100): "))

total_marks = 500
obtained_marks = physics_marks + chemistry_marks + biology_marks + mathematics_marks + computer_marks

percentage = (obtained_marks / total_marks) * 100

print("Percentage:", percentage)

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("Grade:", grade)
```

```
Enter marks in Physics (out of 100): 89
Enter marks in Chemistry (out of 100): 90
Enter marks  in Biology (out of 100): 96
Enter marks in Mathematics (out of 100): 98
Enter marks in Computer (out of 100): 67
Percentage: 88.0
Grade: B
```

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 [32]:
```
unit_charges = float(input("Enter the number of electricity units consumed: "))

if unit_charges <= 50:
    bill = unit_charges * 0.50
elif unit_charges <= 150:
    bill = 50 * 0.50 + (unit_charges - 50) * 0.75
elif unit_charges <= 250:
    bill = 50 * 0.50 + 100 * 0.75 + (unit_charges - 150) * 1.20
else:
    bill = 50 * 0.50 + 100 * 0.75 + 100 * 1.20 + (unit_charges - 250) * 1.50

surcharge = bill * 0.20
total_bill = bill + surcharge

print("Total Electricity Bill: Rs.", total_bill)
```

```
Enter the number of electricity units consumed: 190
Total Electricity Bill: Rs. 177.6
```

In [ ]: