task-1

In [1]:
```
x = 2
y = 4
maxi = max(x,y)
maxi
```

Out[1]: 4

task-2

In [2]:
```
x = 2
y = 4
z = 6
maxii = max(x,y,z)
maxii
```

Out[2]: 6

task-3

In [6]:
```
x = int(input("enter number: "))

if x < 0:
    print("negative")
elif x > 0:
    print("positive")
else:
    print("zero")
```

```
enter number: 4
positive
```

task-4

In [15]:
```
x = int(input("enter number: "))

if x % 5 == 0:
    print("divisibel by 5")
elif x % 11 == 0:
    print("divisible by 11")
else:
    print("not")
```

```
enter number: 44
divisible by 11
```

task-5

In [20]:
```
x = int(input("enter number: "))

if x != 0:
    if x % 2 == 0:
        print("even")
    else:
        print("odd")
else:
    print("error")
```

```
enter number: 6
even
```

task-6

In [22]:
```
x = input("enter alphabet: ")

if x.lower() in "aeiou":
    print("contain vowel")
else:
    print("not")
```

```
enter alphabet: a
contain vowel
```

task-7

In [29]:
```
x = input("enter month day: ")

if x in "1,2,3,4,5,6,7":
    print("week 1")
elif x in "8,9,10,11,12,13,14":
    print("week 2")
elif x in "15,16,17,18,19,20,21":
    print("week 3")
elif x in "22,23,24,25,26,27":
    print("week 4")
elif x in "28,29,30,31":
    print("week 5")
else:
    print("error")
```

```
enter month day: 31
week 5
```

task-8

In [30]:
```
month = int(input("Enter the month number (1-12): "))

if month == 2:
    year = int(input("Enter the year: "))
    if (year % 4 == 0 and year % 100 != 0) or year % 400 == 0:
        days = 29
    else:
        days = 28
elif month in [4, 6, 9, 11]:
    days = 30
else:
    days = 31

print("Number of days in the month:", days)
```

```
Enter the month number (1-12): 2
Enter the year: 2001
Number of days in the month: 28
```

task-9

In [32]:
```
day_number = int(input("Enter the number of the day (1-7): "))

if day_number == 1:
    day_name = "Monday"
elif day_number == 2:
    day_name = "Tuesday"
elif day_number == 3:
    day_name = "Wednesday"
elif day_number == 4:
    day_name = "Thursday"
elif day_number == 5:
    day_name = "Friday"
elif day_number == 6:
    day_name = "Saturday"
elif day_number == 7:
    day_name = "Sunday"
else:
    day_name = "Invalid day number"

print(day_name)
```

```
Enter the number of the day (1-7): 3
Wednesday
```

task-10

In [34]:
```
physics_marks = float(input("Enter Physics marks (out of 100): "))
chemistry_marks = float(input("Enter Chemistry marks (out of 100): "))
biology_marks = float(input("Enter Biology marks (out of 100): "))
mathematics_marks = float(input("Enter Mathematics marks (out of 100): "))
computer_marks = float(input("Enter Computer marks (out of 100): "))

# Calculate percentage for each subject
physics_percentage = (physics_marks / 100) * 100
chemistry_percentage = (chemistry_marks / 100) * 100
biology_percentage = (biology_marks / 100) * 100
mathematics_percentage = (mathematics_marks / 100) * 100
computer_percentage = (computer_marks / 100) * 100

# Calculate grade for each subject
def calculate_grade(percentage):
    if percentage >= 90:
        return "A"
    elif percentage >= 80:
        return "B"
    elif percentage >= 70:
        return "C"
    elif percentage >= 60:
        return "D"
    elif percentage >= 40:
        return "E"
    else:
        return "F"

# Calculate grade for each subject
physics_grade = calculate_grade(physics_percentage)
chemistry_grade = calculate_grade(chemistry_percentage)
biology_grade = calculate_grade(biology_percentage)
mathematics_grade = calculate_grade(mathematics_percentage)
computer_grade = calculate_grade(computer_percentage)

# Print percentage and grade for each subject
print("Physics - Percentage:", physics_percentage, "Grade:", physics_grade)
print("Chemistry - Percentage:", chemistry_percentage, "Grade:", chemistry_grad
print("Biology - Percentage:", biology_percentage, "Grade:", biology_grade)
print("Mathematics - Percentage:", mathematics_percentage, "Grade:", mathematic
print("Computer - Percentage:", computer_percentage, "Grade:", computer_grade)
```

```
Enter Physics marks (out of 100): 10
Enter Chemistry marks (out of 100): 10
Enter Biology marks (out of 100): 10
Enter Mathematics marks (out of 100): 10
Enter Computer marks (out of 100): 10
Physics - Percentage: 10.0 Grade: F
Chemistry - Percentage: 10.0 Grade: F
Biology - Percentage: 10.0 Grade: F
Mathematics - Percentage: 10.0 Grade: F
Computer - Percentage: 10.0 Grade: F
```

task-11

In [38]:
```
unit_charges = float(input("Enter the electricity unit charges: "))

if unit_charges <= 50:
    total_bill = unit_charges * 0.50
elif unit_charges <= 150:
    total_bill = 50 * 0.50 + (unit_charges - 50) * 0.75
elif unit_charges <= 250:
    total_bill = 50 * 0.50 + 100 * 0.75 + (unit_charges - 150) * 1.20
else:
    total_bill = 50 * 0.50 + 100 * 0.75 + 100 * 1.20 + (unit_charges - 250) * 1

total_bill += total_bill * 0.20  # Adding 20% surcharge

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

```
Enter the electricity unit charges: 300
Total electricity bill: Rs. 354.0
```