Assignment 04

In [2]:
```
#Que 1:- Ramesh’s basic salary is input through the keyboard. His dearness allow
# house rent allowance is 20% of basic salary. Write a program to calculate his
```

In [69]:
```
try:
    basic_salary = eval(input("Enter Ramesh's basic salary: "))
    dearness_allowance = 0.40 * basic_salary
    house_rent_allowance = 0.20 * basic_salary
    gross_salary = basic_salary + dearness_allowance + house_rent_allowance
    print(f"Ramesh's gross salary is: {gross_salary}")
except Exception as e:
    print(e)
```

```
Ramesh's gross salary is: 160.0
```

In [ ]:
```
# Que 2:- The distance between two cities(in Km.) is input through the keyboard.
```

In [70]:
```
try:
    distance = eval(input("Enter the distance between two cities in (Km):-"))
    meter = distance*1000
    print(f"The distance between two cities in meter is:- {meter}")
    feet = distance*3280.84
    print(f"The distance between two cities in feet is:- {feet}")
    inches = distance*39370.1
    print(f"The distance between two cities in inches is:- {inches}")
    centimeters = distance*100000
    print(f"The distance between two cities in centimeters is:- {centimeters}")
except Exception as e:
    print(e)
```

```
The distance between two cities in meter is:- 1000
The distance between two cities in feet is:- 3280.84
The distance between two cities in inches is:- 39370.1
The distance between two cities in centimeters is:- 100000
```

In [4]:
```
#Que 3:- If the marks obtained by a student in five different subjects are input
```

In [17]:
```
try:
    eng = int(input("Enter English Marks:-"))
    math = int(input("Enter Math Marks:-"))
    science = int(input("Enter Science Marks:-"))
    social_science = int(input("Enter Social Science Marks:-"))
    hindi = int(input("Enter Hindi Marks:-"))

    aggregate = eng+math+science+social_science+hindi

    percentage = (aggregate/500)*100

    print(f"You got this {percentage} percentage")
except Exception as e:
    print(e)
```

```
You got this 63.6 percentage
```

In [ ]:
```
#Que :-4 Temperature of a city in Fahrenheit degrees is input through the keyboa
```

In [23]:
```
try:
    temp = eval(input("Enter a city temperature in Fahrenheit degrees:-"))
    cent = (temp-32)*(5/9)
    cent_1 = round(cent,2)
    print(f"Convert temperature fahrenheit into centigrade is:- {cent_1}")
except Exception as e:
    print(e)
```

```
Convert temperature fahrenheit into centigrade is:- 7.22
```

In [5]:
```
# Que 5:- The length & breadth of a rectangle and radius of a circle are input t
# program to calculate the area & perimeter of the rectangle, and the area & cir
```

In [71]:
```
try:
    import math
    length = eval(input("Enter a lenght of a rectangle:-"))
    width = eval(input("Enter a width of a rectangle:-"))
    radius = eval(input("Enter a radius of a circle:-"))
    pi = math.pi
    rectangle_area = width*length
    print(f"The area of a rectangle is:- {rectangle_area}")

    rectangle_parimeter = 2*(width+length)
    print(f"The parimeter of a rectangle is:- {rectangle_parimeter}")

    circle_area = pi*radius*radius
    circle_area_1 = round(circle_area,2)
    print(f"The area of a circle is:- {circle_area_1}")

    circle_circumference = 2*pi*radius
    circle_circumference_1 = round(circle_circumference,2)
    print(f"The circumference of a circle is:- {circle_circumference_1}")
except Exception as e:
    print(e)
```

```
The area of a rectangle is:- 8
The parimeter of a rectangle is:- 12
The area of a circle is:- 113.1
The circumference of a circle is:- 37.7
```

In [ ]:
```
# Que 6:-  Two numbers are input through the keyboard into two locations C and D
# the contents of C and D.
```

In [72]:
```
try:
    location_c = eval(input("Enter a number of location C is:-"))
    location_d = eval(input("Enter a number of location D is:-"))

    print(f"The value of C before change is:-{location_c}")
    print(f"The value of D before change is:-{location_d}")

    new_location_a = location_c
    location_c = location_d
    location_d = new_location_a

    print(f"The value of C After change is:-{location_c}")
    print(f"The value of D After change is:-{location_d}")
except Exception as e:
    print(e)
```

```
The value of C before change is:-10
The value of D before change is:-9
The value of C After change is:-9
The value of D After change is:-10
```

In [30]:
```
# Que:- 7. If a five-digit number is input through the keyboard, write a program
```

In [29]:
```
try:
    num = int(input("Enter a 5-digit number")) # Taking 5 digits here
    print(num)
    reverse = 0

    new_num = num%10  # 12345%10  ans--> 5
    num = num//10     # 12345//10 ans--> 1234
    reverse = reverse + new_num*10000   # 0 + 5*10000 => 50000

    new_num = num%10  # 12345%10  ans--> 54
    num = num//10     # 1234//10  ans--> 123
    reverse = reverse + new_num*1000 # 0+54*1000 => 54000

    new_num = num%10    # 12345%10  ans--> 543
    num = num//10       # 123//10  ans--> 12
    reverse = reverse + new_num*100

    new_num = num%10     # 12345%10  ans--> 5432
    num = num//10        # 12//10  ans--> 1
    reverse = reverse + new_num*10

    new_num = num%10      # 12345%10  ans--> 54321
    num = num//10         # 1//10  ans--> 0
    reverse = reverse + new_num

    print(f"reverse the 5_digits = {reverse}")
except Exception as e:
    print(e)
```

```
12345
reverse the 5_digits = 54321
```

In [ ]:
```
#Que 8. If a four-digit number is input through the keyboard, write a program to
last digit of this number.
```

In [14]:
```
try:
    n = int(input("Four digit input:- "))
    print(n)
    sum = 0

    first_num = n//1000      # 1234//1000 => 1
    print(f"This is a first digit:- {first_num}")

    last_num = n%10          # 1234%10 => 4
    print(f"This is a last digit:- {last_num}")

    result = first_num +last_num
    print(f"The addition of {first_num} and {last_num} is:- {result}")

except Exception as e:
    print(e)
```

```
9458
This is a first digit:- 9
This is a last digit:- 8
The addition of 9 and 8 is:- 17
```

In [11]:
```
1234%10
```

Out[11]: 4

In [ ]:
```
#Que:-9 In a town, the percentage of men is 52. The percentage of total literacy
men is 35 of the total population, write a program to find the total number of i
the population of the town is 80,000.
```

In [73]:
```
try:
    per_men = 52
    per_total_literacy = 48
    total_per_literacy_men = 35
    population_of_town = 80000

    total_per_literacy_women = per_total_literacy - total_per_literacy_men

    total_number_literate_men = (total_per_literacy_men * population_of_town)/10
    total_number_literate_woman = (total_per_literacy_women * population_of_town

    print(f"The total number of literate man is:- {total_number_literate_men}")
    print(f"The total number of literate woman is:- {total_number_literate_woman
except Exception as e:
    print(e)
```

```
The total number of literate man is:- 28000.0
The total number of literate woman is:- 10400.0
```

In [ ]:
```
#Que10:-A cashier has currency notes of denominations 10, 50 and 100. If the amo
through the keyboard in hundreds, find the total number of currency notes of eac
cashier will have to give to the withdrawer.
```

In [83]:
```
try:
    withdrawn = int(input("Enter the withdrawn amount in hundreds:- "))
    hundred = withdrawn//100 # 25070 //100 = 250
    withdrawn = withdrawn%100 # 25070%100 = 70
    fifty = withdrawn//50    #70//50 = 1
    withdrawn = withdrawn%50   #70%50 = 20
    ten = withdrawn//10       #20//10 = 2

    print(f"Number of Hundred notes is:- {hundred}")
    print(f"Number of fifty notes is:- {fifty}")
    print(f"Number of ten notes is:- {ten}")
except Exception as e:
    print(e)
```

```
Number of Hundred notes is:- 250
Number of fifty notes is:- 1
Number of ten notes is:- 2
```

In [81]:
```
25070//100
25070%100
70//50
70%50
20//10
```

Out[81]: 2