

Task 1: Store your Bio data (Name, roll number, age, date of birth and Gender) in the variables.

```
In [4]: 1 Name=input('enter your name :')
2 roll_number=input('enter your roll number: ')
3 age=int(input('enter your age: '))
4 date_of_birth=(input('enter your date of birth: '))
5 gender=input('enter your gender: ')
6 print('\n')
7 print(f'My name is {Name} ')
8 print(f'I'm {age} years old ')
9 print(f'My roll number is {roll_number} ')
10 print(f'My date of birth is {date_of_birth} ')
11 print(f'I'm {gender}')
```

```
enter your name :Usama Arif
enter your roll number: 14
enter your age: 23
enter your date of birth: 5_july_2000
enter your gender: Male
```

```
My name is Usama Arif
I'm 23 years old
My roll number is 14
My date of birth is 5_july_2000
I'mMale
```

Task 2: Write a program to convert US dollar into Pakistani Rupees.

```
In [5]: 1 # Exchange rate of 1 USD to PKR
2 exchange_rate = 380
3
4 dollars = float(input("Enter the amount in US dollars: "))
5 pkr = dollars * exchange_rate
6 print("${} is equal to {} Pakistani Rupees.".format(dollars, pkr))
7
```

```
Enter the amount in US dollars: 466
$466.0 is equal to 177080.0 Pakistani Rupees.
```

Task3: Take two number from user and then Calculate these manipulations sum, subtract, multiple and division

```
In [6]: 1 num1 = float(input("Enter the first number: "))
2 num2 = float(input("Enter the second number: "))
3
4 sum_result = num1 + num2
5 subtract_result = num1 - num2
6 multiply_result = num1 * num2
7 if num2 != 0:
8     division_result = num1 / num2
9 else:
10    division_result = "Error: Cannot divide by zero"
11 print("Sum:", sum_result)
12 print("Subtraction:", subtract_result)
13 print("Multiplication:", multiply_result)
14 print("Division:", division_result)
15
```

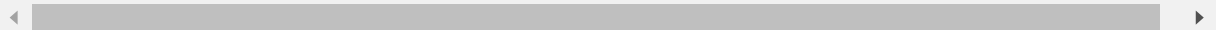
Enter the first number: 34
Enter the second number: 45
Sum: 79.0
Subtraction: -11.0
Multiplication: 1530.0
Division: 0.7555555555555555

Task3 diagram

```
In [8]: 1 width = 23
2 height = 6
3 print("*" * width)
4
5 for i in range(height - 2):
6     print("*" + " " * (width - 2) + "*")
7
8
9 print("*" * width)
10
```

```
*****
*                                     *
*                                     *
*                                     *
*                                     *
*                                     *
*****
```

Task 5: take two number from user and divide them and display them without floating point.



```
In [9]: 1 num1 = int(input("Enter the first number: "))
        2 num2 = int(input("Enter the second number: "))
        3
        4 quotient = num1 // num2
        5
        6
        7 print("Quotient:", quotient)
        8
```

Enter the first number: 45
Enter the second number: 45
Quotient: 1

Task 6: Take the value from user in Celsius and covert into Fahrenheit.

```
In [10]: 1 celsius = float(input("Enter the temperature in Celsius: "))
        2 fahrenheit = celsius * 9/5 + 32
        3 print("Temperature in Fahrenheit:", fahrenheit)
        4
```

Enter the temperature in Celsius: 36
Temperature in Fahrenheit: 96.8

```
In [ ]: 1 # Task 7: find the slope x1=5, x2=10 Where y1=3, y2=5 , b will be enter fr
```

```
In [15]: 1 x1 = 15
        2 x2 = 10
        3 y1 = 13
        4 y2 = 9
        5 b = float(input("Enter the value of b (y-intercept): "))
        6
        7 slope = (y2 - y1) / (x2 - x1)
        8 print(f'Eqaution: y= {slope}x + {b}')
        9
```

Enter the value of b (y-intercept): 5
Eqaution: y= 0.8x + 5.0

Task 8: Enter your height in feet and centimetres then system will display in meters

```
In [16]: 1 feet = float(input("Enter your height in feet: "))
2 centimeters = float(input("Enter your height in centimeters: "))
3 inches = feet * 12 # Convert feet to inches
4 total_inches = inches + centimeters / 2.54 # Convert inches and centimeters to inches
5 meters = total_inches * 0.0254 # Convert total inches to meters
6
7 # Display the height in meters
8 print("Your height in meters:", meters)
9
```

Enter your height in feet: 5.6

Enter your height in centimeters: 170.688

Your height in meters: 3.4137599999999995

Task9: Enter your matriculation marks subject wise and the system will display total marks and percentage of all also display subject wise percentage

```
In [20]: 1 # Subject-wise maximum marks
2 math_max_marks = 100
3 bio_max_marks = 100
4 physics_max_marks = 100
5 chemistry_max_marks = 100
6 urdu_max_marks = 100
7 english_max_marks = 100
8 islamiyat_max_marks = 50
9 pak_study_max_marks = 50
10
11 # Input the marks for each subject from the user
12 math_marks = float(input("Enter the marks for Math: "))
13 bio_marks = float(input("Enter the marks for Biology: "))
14 physics_marks = float(input("Enter the marks for Physics: "))
15 chemistry_marks = float(input("Enter the marks for Chemistry: "))
16 urdu_marks = float(input("Enter the marks for Urdu: "))
17 english_marks = float(input("Enter the marks for English: "))
18 islamiyat_marks = float(input("Enter the marks for Islamiyat: "))
19 pak_study_marks = float(input("Enter the marks for Pakistan Study: "))
20
21 # Calculate the total marks
22 total_marks = (math_marks + bio_marks + physics_marks + chemistry_marks +
23               islamiyat_marks + pak_study_marks)
24
25 # Calculate the percentage for each subject
26 math_percentage = (math_marks / math_max_marks) * 100
27 bio_percentage = (bio_marks / bio_max_marks) * 100
28 physics_percentage = (physics_marks / physics_max_marks) * 100
29 chemistry_percentage = (chemistry_marks / chemistry_max_marks) * 100
30 urdu_percentage = (urdu_marks / urdu_max_marks) * 100
31 english_percentage = (english_marks / english_max_marks) * 100
32 islamiyat_percentage = (islamiyat_marks / islamiyat_max_marks) * 100
33 pak_study_percentage = (pak_study_marks / pak_study_max_marks) * 100
34 #total percentage
35 total_percentage=(total_marks/800)*100
36 print('total percentage ',total_percentage)
37 # Display the total marks and percentage for each subject
38 print("Total Marks: ", total_marks)
39 print("Math Percentage: ", math_percentage)
40 print("Biology Percentage: ", bio_percentage)
41 print("Physics Percentage: ", physics_percentage)
42 print("Chemistry Percentage: ", chemistry_percentage)
43 print("Urdu Percentage: ", urdu_percentage)
44 print("English Percentage: ", english_percentage)
45 print("Islamiyat Percentage: ", islamiyat_percentage)
46 print("Pakistan Study Percentage: ", pak_study_percentage)
47
48
49
```

```
Enter the marks for Math: 94
Enter the marks for Biology: 89
Enter the marks for Physics: 89
Enter the marks for Chemistry: 87
Enter the marks for Urdu: 80
Enter the marks for English: 94
Enter the marks for Islamyat: 46
Enter the marks for Pakistan Study: 47
total percentage 78.25
Total Marks: 626.0
Math Percentage: 94.0
Biology Percentage: 89.0
Physics Percentage: 89.0
Chemistry Percentage: 87.0
Urdu Percentage: 80.0
English Percentage: 94.0
Islamyat Percentage: 92.0
Pakistan Study Percentage: 94.0
```

In []:

1