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LAB2:-Python Statements

1. Using input() function take one number from the user and using ternary operators check whether the number is even or odd

num = int(input("Enter a number: "))

if num % 2 == 0:

print("Even")

else:

print("Odd")

output

Enter a number: 10

Even

Explanation:

1. **%** is the modulus operator, which returns the remainder of the division. So num % 2 checks if the number is divisible by 2.
2. **== 0** checks if the remainder is 0 (i.e., the number is even).
3. **else** should be used instead of eles.

2.Swap two numbers using the input() function:

Num1 = int(input("Enter the first number: "))

Num2 = int(input("Enter the second number: "))

print("Before swapping:", Num1, Num2)

# Swapping using a temporary variable

temp = Num1

Num1 = Num2

Num2 = temp

print("After swapping:", Num1, Num2)

output

Enter the first number: 12

Enter the second number: 10

Before swapping: 12 10

After swapping: 10 12

Explanation:

1. **temp = Num1** stores the value of Num1 in a temporary variable.
2. **Num1 = Num2** assigns the value of Num2 to Num1.
3. **Num2 = temp** assigns the value stored in temp (the original Num1) to Num2.

3.Write a Program to Convert Kilometers to Miles

kilometers = float(input("Enter distance in kilometers: "))

miles = kilometers \* 0.621371

print(miles)

output

Enter distance in kilometers: 10

6.21371

Explanation:

1. **kilometers = float(input("Enter distance in kilometers: "))**: This line takes the input from the user, converts it to a floating-point number (to allow decimal values), and assigns it to the variable kilometers.
2. **miles = kilometers \* 0.621371**: This line converts the distance from kilometers to miles by multiplying the kilometer value by the conversion factor 0.621371.
3. **print(miles)**: This line prints the converted distance in miles.

4. Find the Simple Interest on Rs. 200 for 5 years at 5% per year.

principal = 200

rate = 5

time = 5

# Simple Interest formula: SI = (P \* R \* T) / 100

simple\_interest = (principal \* rate \* time) / 100

print(simple\_interest)

output

50.0

Explanation:

1. **principal = 200**: The principal amount is 200 units.
2. **rate = 5**: The interest rate is 5% per annum.
3. **time = 5**: The time period is 5 years.
4. **simple\_interest = (principal \* rate \* time) / 100**: This line calculates the simple interest by multiplying the principal, rate, and time, then dividing by 100 to adjust for the percentage.