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LAB 3 Statements

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

Code:

```
# Take input from the user
num = int(input("Enter a number: "))

# Check if the number is even or odd using ternary operators
result = "Even" if num % 2 == 0 else "Odd"

# Print the result
print(f"The number {num} is {result}.")
```

Output:

Enter a number: 9
The number 9 is Odd.

Enter a number: 6
The number 6 is Even.

2. Using input function take two number and then swap the number.

Code:

```
# Take input from the user for the first number
num1 = float(input("Enter the first number: "))

# Take input from the user for the second number
num2 = float(input("Enter the second number: "))

# Print the numbers before swapping
print(f"Before swapping: num1 = {num1}, num2 = {num2}")

# Swap the numbers
num1, num2 = num2, num1

# Print the numbers after swapping
```

```
print(f"After swapping: num1 = {num1}, num2 = {num2}")
```

Output:

Enter the first number: 5

Enter the second number: 20

Before swapping: num1 = 5.0, num2 = 20.0

After swapping: num1 = 20.0, num2 = 5.0

3. Write a Program to Convert Kilometers to Miles.

Code:

```
# Function to convert kilometers to miles
```

```
def km_to_miles(km):
```

```
    # 1 kilometer is equal to 0.621371 miles
```

```
    miles = km * 0.621371
```

```
    return miles
```

```
# Main function
```

```
def main():
```

```
    # Take input from the user for kilometers
```

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

```
    # Convert kilometers to miles
```

```
    miles = km_to_miles(km)
```

```
    # Print the result
```

```
    print(f"{km} kilometers is equal to {miles} miles.")
```

```
# Execute the main function
```

```
if __name__ == "__main__":
```

```
    main()
```

Output:

Enter distance in kilometers: 5

5.0 kilometers is equal to 3.106855 miles.

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

Code:

```
def calculate_simple_interest(principal, rate, time):  
    # Simple interest formula: SI = (P * R * T) / 100  
    simple_interest = (principal * rate * time) / 100  
    return simple_interest  
  
def main():  
    # Input principal amount, rate of interest, and time period from the user  
    principal = float(input("Enter the principal amount (in Rs.): "))  
    rate = float(input("Enter the rate of interest (in percentage): "))  
    time = float(input("Enter the time period (in years): "))  
  
    # Calculate simple interest  
    si = calculate_simple_interest(principal, rate, time)  
  
    # Print the result  
    print(f"\nThe simple interest on Rs. {principal} for {time} years at {rate}% per year is  
Rs. {si:.2f}.")  
  
if __name__ == "__main__":  
    main()
```

Output:

```
Enter the principal amount (in Rs.): 20000  
Enter the rate of interest (in percentage): 4  
Enter the time period (in years): 6
```

```
The simple interest on Rs. 20000.0 for 6.0 years at 4.0% per year is Rs. 4800.00.
```