

TASK: 1

Write a program that calculates and prints the simple interest. Take the principal rate and time from user as input.

CODE:

```
principal = float(input("Enter the principal amount: "))
rate = float(input("Enter the rate of interest (in %): "))
time = float(input("Enter the time (in years): "))

simple_interest = (principal * rate * time) / 100
print(f"earned interest: {simple_interest}")
```

OUTPUT:

```
Enter the principal amount: 3000
Enter the rate of interest (in %): 12
Enter the time (in years): 1
earned interest: 360.0
```

TASK: 2

Write a program that calculates BMI based on user weight and height

CODE:

```
weight = float(input("Enter your weight in kilograms: "))
height = float(input("Enter your height in meters: "))

bmi = weight / (height ** 2)
print(f"Your BMI is: {bmi}")
```

OUTPUT:

```
shubhamsharma@Shubhams-Air lab1 % python3 2.py
Enter your weight in kilograms: 65
Enter your height in meters: 1.7
Your BMI is: 22.49134948096886
```

TASK: 3

Write a program that swaps the value of two variables using a temporary variable

CODE:

```
a = input("Enter the value of a: ")
b = input("Enter the value of b: ")

temp=a; a=b; b=temp;
print(f"After swapping:\na = {a}\nb = {b}")
```

OUTPUT:

```
shubhamsharma@Shubhams-Air lab1 % python3 3.py
Enter the value of a: 45
Enter the value of b: 22
After swapping:
a = 22
b = 45
```

TASK: 4

WAP to swap the value of two variables

CODE:

```
a = input("Enter the value of a: ")
b = input("Enter the value of b: ")
a,b=b,a

print(f"After swapping:\na = {a}\nb = {b}")
```

OUTPUT:

```
shubhamsharma@Shubhams-Air lab1 % python3 4.py
Enter the value of a: 4
Enter the value of b: 6
After swapping:
a = 6
b = 4
```

TASK: 5

WAP that converts given number of days into years and weeks

CODE:

```
input = int(input("Enter the number of days: "))
days = input
years = input // 365
weeks = float(float(days%365) // 7)

print(f"{days} days is equal to {years} year(s) and
{weeks} week(s).")
```

OUTPUT:

```
● shubhamsharma@Shubhams-Air lab1 % python3 5.py
Enter the number of days: 365
365 days is equal to 1 year(s) and 0.0 week(s).
```