devanshu-finlatics-1

April 10, 2024

[1]:
```
# Q1
name = input("Enter your name: ")
print("Hello,", name + "!")

# Prompt user to enter two values
value1 = input("Enter the first value: ")
value2 = input("Enter the second value: ")

# Print original values
print("Original values:", value1, value2)

# Swap the values
value1, value2 = value2, value1

# Print swapped values
print("Swapped values:", value1, value2)
```

```
Enter your name: Devanshu
Hello, Devanshu!
Enter the first value: 2
Enter the second value: 4
Original values: 2 4
Swapped values: 4 2
```

[2]:
```
# Q2
import math

radius = float(input("Enter the radius of the circle: "))
area = math.pi * radius ** 2
print("The area of the circle is:", area)
```

```
Enter the radius of the circle: 5
The area of the circle is: 78.53981633974483
```

[3]:
```
# Q3
from datetime import datetime

birth_year = int(input("Enter your birth year: "))
```

```
current_year = datetime.now().year
age = current_year - birth_year
print("Your current age is:", age)
```

```
Enter your birth year: 2003
Your current age is: 21
```

[4]:
```
# Q4
name = input("Enter your name: ")
favorite_cake = input("Enter your favorite cake flavor: ")

message = f"Hello, {name}! We're delighted to serve you your favorite␣
 ↪{favorite_cake} cake on your birthday. Happy Birthday."
print(message)
```

```
Enter your name: Devanshu
Enter your favorite cake flavor: Chocolate
Hello, Devanshu! We're delighted to serve you your favorite Chocolate cake on
your birthday. Happy Birthday.
```

[5]:
```
# Q5
principal = float(input("Enter the principal amount: "))
rate = float(input("Enter the rate of interest (in percentage): "))
time = float(input("Enter the time period (in years): "))

simple_interest = (principal * rate * time) / 100
print("Simple interest:", simple_interest)
```

```
Enter the principal amount: 10000
Enter the rate of interest (in percentage): 12
Enter the time period (in years): 20
Simple interest: 24000.0
```