

C Slc > ...

1

// Q9: Write a program to calculate simple and compound interest for given principal, rate, and time.

2

3

/*

4 Sample Test Cases:

5 Input 1:

6 1000 5 2

7 Output 1:

8 Simple Interest=100, Compound Interest=102.5

9

10 Input 2:

11 5000 7 3

12 Output 2:

13 Simple Interest=1050, Compound Interest=1125.21

14

15 */

16

17 #include <stdio.h>

18 #include <math.h>

19

20 int main()

21 {

22 float principal, rate, time;

23 float simple_interest, compound_interest;

24

25 printf("Enter principal amount: ");

26 scanf("%f", &principal);

27 printf("Enter rate of interest: ");

28 scanf("%f", &rate);

29 printf("Enter time (in years): ");

30 scanf("%f", &time);

31

32 simple_interest = (principal * rate * time) / 100;

33

34 compound_interest = principal * pow((1 + rate / 100), time) - principal;

35

36 printf("Simple Interest = %.2f\n", simple_interest);

37 printf("Compound Interest = %.2f\n", compound_interest);

38

39 return 0;

40 }

41

PS C:\Users\drago\OneDrive\Desktop\C PROGRAM> gcc .\SI.c

PS C:\Users\drago\OneDrive\Desktop\C PROGRAM> ./a.exe

Enter principal amount: 1000

Enter rate of interest: 5

Enter time (in years): 2

Simple Interest = 100.00

Compound Interest = 102.50

PS C:\Users\drago\OneDrive\Desktop\C PROGRAM> gcc .\SI.c

PS C:\Users\drago\OneDrive\Desktop\C PROGRAM> ./a.exe

Enter principal amount: 5000

Enter rate of interest: 7

Enter time (in years): 3

Simple Interest = 1050.00

Compound Interest = 1125.21

PS C:\Users\drago\OneDrive\Desktop\C PROGRAM>

```
C day5_q10.c > main()
1 // Q10: Write a program to input time in seconds and convert it to hours:minutes:seconds format.
2
3 /*
4 Sample Test Cases:
5 Input 1:
6 3661
7 Output 1:
8 1:1:1
9
10 Input 2:
11 7322
12 Output 2:
13 2:2:2
14
15 */
16
17 #include <stdio.h>
18
19 int main() {
20     int seconds, h, m, s;
21
22     printf("Enter time in seconds: ");
23     scanf("%d", &seconds);
24
25     h = seconds / 3600;
26     m = (seconds % 3600) / 60;
27     s = seconds % 60;
28
29     printf("Time = %2d:%2d:%2d\n", h, m, s);
30
31     return 0;
32 }
33
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc .\day5_q10.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
Enter time in seconds: 3661
Time = 1: 1: 1
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc .\day5_q10.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
Enter time in seconds: 7322
Time = 2: 2: 2
PS C:\Users\drago\OneDrive\Desktop\C H.W> 
```