

Q1 find sum of 2 number with user input

```
C day1.c X
C day1.c > main()
1  #include <stdio.h>
2
3  int main() {
4      int num1, num2, sum;
5
6      printf("Enter first number: ");
7      scanf("%d", &num1);
8
9      printf("Enter second number: ");
10     scanf("%d", &num2);
11
12     sum = num1 + num2;
13
14     printf("The sum of %d and %d is %d\n", num1, num2, sum);
15
16     return 0;
17 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS

PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day1.c -o day1 } ; if ($?) { .\day1 }
Enter first number: 3
Enter second number: 7
The sum of 3 and 7 is 10
PS C:\Users\nitis\OneDrive\Desktop\c language> 
```

Q2 write a program to input Two numbers and display their sum difference product and Quotient.

```
C day1.c X
C day1.c > main()
1  #include <stdio.h>
2
3  int main() {
4      int num1, num2;
5      int sum, diff, prod;
6      float quotient;
7      printf("Enter first number: ");
8      scanf("%d", &num1);
9      printf("Enter second number: ");
10     scanf("%d", &num2);
11     sum = num1 + num2;
12     diff = num1 - num2;
13     prod = num1 * num2;
14     quotient = (float)num1 / num2;
15     printf("Sum = %d\n", sum);
16     printf("Difference = %d\n", diff);
17     printf("Product = %d\n", prod);
18     printf("Quotient = %.2f\n", quotient);
19
20     return 0;
21 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS

PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day1.c -o day1 } ; if ($?) { .\day1 }
Enter first number: 7
Enter second number: 8
Sum = 15
Difference = -1
Product = 56
Quotient = 0.88
```

Q3 Write a programme to calculate area and perimeter of a rectangle given its length in breadth.

```
C day2.c X
C day2.c > main()
1  #include <stdio.h>
2
3  int main() {
4      float length, breadth, area, perimeter;
5
6      printf("Enter length of the rectangle: ");
7      scanf("%f", &length);
8
9      printf("Enter breadth of the rectangle: ");
10     scanf("%f", &breadth);
11
12     area = length * breadth;
13     perimeter = 2 * (length + breadth);
14
15     printf("Area of rectangle = %.2f\n", area);
16     printf("Perimeter of rectangle = %.2f\n", perimeter);
17
18     return 0;
19 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day2.c -o day2 }
Enter length of the rectangle: 34
Enter breadth of the rectangle: 65
Area of rectangle = 2210.00
Perimeter of rectangle = 198.00
PS C:\Users\nitis\OneDrive\Desktop\c language>
```

Q4 Write a programme to calculate the area and circumference of a circle given its radius.

```
C day2.c X
C:\Users\nitis\OneDrive\Desktop\c language\day2.c
1  #include <stdio.h>
2  #define PI 3.14159
3
4  int main() {
5      float radius, area, circumference;
6
7      printf("Enter the radius of the circle: ");
8      scanf("%f", &radius);
9
10     area = PI * radius * radius;
11     circumference = 2 * PI * radius;
12
13     printf("Area of circle = %.2f\n", area);
14     printf("Circumference of circle = %.2f\n", circumference);
15
16     return 0;
17 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day2.c -o day2 }
Enter the radius of the circle: 76
Area of circle = 18145.82
Circumference of circle = 477.52
PS C:\Users\nitis\OneDrive\Desktop\c language>
```

Q5 Write a programme to convert temperature from Celsius to Fahrenheit.

```
C day3.c x
C:\Users\nitis\OneDrive\Desktop\c language\day3.c
1
2 #include <stdio.h>
3
4 int main() {
5     float celsius, fahrenheit;
6
7     printf("Enter temperature in Celsius: ");
8     scanf("%f", &celsius);
9
10    fahrenheit = (celsius * 9 / 5) + 32;
11
12    printf("Temperature in Fahrenheit = %.2f\n", fahrenheit);
13
14    return 0;
15 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day3.c -o day3 }
? { .\day3 }
Enter temperature in Celsius: -40
Temperature in Fahrenheit = -40.00
PS C:\Users\nitis\OneDrive\Desktop\c language>
```

Q6 Write a programme to swap two numbers using 3rd variable.

```
C day3.c x
C day3.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int a, b, temp;
5
6     printf("Enter first number: ");
7     scanf("%d", &a);
8
9     printf("Enter second number: ");
10    scanf("%d", &b);
11
12    temp = a;
13    a = b;
14    b = temp;
15
16    printf("After swapping:\n");
17    printf("First number = %d\n", a);
18    printf("Second number = %d\n", b);
19
20    return 0;
21 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day3.c -o day3 }
? { .\day3 }
Enter first number: 43
Enter second number: 65
After swapping:
First number = 65
Second number = 43
PS C:\Users\nitis\OneDrive\Desktop\c language>
```

Q7 Write a programme to swap two numbers without using a 3rd variable.

```
C day4.c x
C day4.c > ...
1  #include <stdio.h>
2
3  int main() {
4      int a, b;
5
6      printf("Enter first number: ");
7      scanf("%d", &a);
8
9      printf("Enter second number: ");
10     scanf("%d", &b);
11
12     a = a + b;
13     b = a - b;
14     a = a - b;
15
16     printf("After swapping:\n");
17     printf("First number = %d\n", a);
18     printf("Second number = %d\n", b);
19
20     return 0;
}

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day4.c -o day4 } ;
? ) { .\day4 }
Enter first number: 54
Enter second number: 65
After swapping:
First number = 65
Second number = 54
PS C:\Users\nitis\OneDrive\Desktop\c language> |
```

Q8 Write a programme to find and display the sum of first n natural numbers.

```
C day4.c x
C day4.c > ...
1  #include <stdio.h>
2
3  int main() {
4      int n, sum;
5
6      printf("Enter value of n: ");
7      scanf("%d", &n);
8
9      sum = n * (n + 1) / 2;
10
11     printf("Sum of first %d natural numbers = %d\n", n, sum);
12
13     return 0;
14 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day4.c -o day4 } ;
? ) { .\day4 }
Enter value of n: 65
Sum of first 65 natural numbers = 2145
PS C:\Users\nitis\OneDrive\Desktop\c language> |
```

Q9 Write a programme to calculate simple and compound interest for given principal rate and time.

```
C day5.c X
C day5.c > main()
1  #include <stdio.h>
2  #include <math.h>
3
4  int main() {
5      float principal, rate, time;
6      float simple_interest, compound_interest, amount;
7
8      printf("Enter Principal: ");
9      scanf("%f", &principal);
10     printf("Enter Rate of Interest: ");
11     scanf("%f", &rate);
12     printf("Enter Time (in years): ");
13     scanf("%f", &time);
14     simple_interest = (principal * rate * time) / 100;
15     amount = principal * pow((1 + rate / 100), time);
16     compound_interest = amount - principal;
17     printf("Simple Interest = %.2f\n", simple_interest);
18     printf("Compound Interest = %.2f\n", compound_interest);
19     return 0;
20 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day5.c -o day5 }
? ) { .\day5 }
Enter Principal: 7654
Enter Rate of Interest: 9
Enter Time (in years): 9
Simple Interest = 6199.74
Compound Interest = 8969.67
PS C:\Users\nitis\OneDrive\Desktop\c language>
```

Q10 Write programme to input time in seconds and convert it into hours minutes second format.

```
C day5.c X
C day5.c > ...
1  #include <stdio.h>
2
3  int main() {
4      int total_seconds, hours, minutes, seconds;
5
6      printf("Enter time in seconds: ");
7      scanf("%d", &total_seconds);
8
9      hours = total_seconds / 3600;
10     minutes = (total_seconds % 3600) / 60;
11     seconds = total_seconds % 60;
12
13     printf("Time = %d hours %d minutes %d seconds\n", hours, minutes, seconds);
14
15     return 0;
16 }

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS
PS C:\Users\nitis\OneDrive\Desktop\c language> cd "c:\Users\nitis\OneDrive\Desktop\c language\" ; if ($?) { gcc day5.c -o day5 }
? ) { .\day5 }
Enter time in seconds: 6545
Time = 1 hours 49 minutes 5 seconds
PS C:\Users\nitis\OneDrive\Desktop\c language>
```