**ASSIGNMENT**

**1.C program** to add two integers

#include <stdio.h>

int main() {

int num1, num2, sum;

// Ask the user to enter two integers

printf("Enter first integer: ");

scanf("%d", &num1);

printf("Enter second integer: ");

scanf("%d", &num2);

// Calculate the sum

sum = num1 + num2;

// Display the result

printf("Sum = %d\n", sum);

return 0;

}

### ✅ Output Example:

Enter first integer: 5

Enter second integer: 7

Sum=12

2. **C program to swap two numbers**

#include <stdio.h>

int main() {

int a, b, temp;

// Get input from user

printf("Enter first number: ");

scanf("%d", &a);

printf("Enter second number: ");

scanf("%d", &b);

// Swapping using temp variable

temp = a;

a = b;

b = temp;

// Display result

printf("After swapping:\n");

printf("First number = %d\n", a);

printf("Second number = %d\n", b);

return 0;

}

### ✅ Sample Output:

Enter first number: 10

Enter second number: 20

After swapping:

First number = 20

Second number = 10

3.**C program to swap two numbers without using a temporary variable**:

#include <stdio.h>

int main() {

int a, b;

// Input values

printf("Enter first number: ");

scanf("%d", &a);

printf("Enter second number: ");

scanf("%d", &b);

// Swapping without temporary variable

a = a + b;

b = a - b;

a = a - b;

// Display result

printf("After swapping:\n");

printf("First number = %d\n", a);

printf("Second number = %d\n", b);

return 0;

}

### ✅ Sample Output:

Enter first number: 15

Enter second number: 30

After swapping:

First number = 30

Second number = 15

4. **C program to find the ASCII value of a character**:

#include <stdio.h>

int main() {

char ch;

// Get character input from user

printf("Enter a character: ");

scanf("%c", &ch);

// Display ASCII value

printf("The ASCII value of '%c' is %d\n", ch, ch);

return 0;

}

### ✅ Sample Output:

Enter a character: A

The ASCII value of 'A' is 65

5.**C program to calculate the area and perimeter of a rectangle**:

#include <stdio.h>

int main() {

float length, width, area, perimeter;

// Get length and width from user

printf("Enter the length of the rectangle: ");

scanf("%f", &length);

printf("Enter the width of the rectangle: ");

scanf("%f", &width);

// Calculate area and perimeter

area = length \* width;

perimeter = 2 \* (length + width);

// Display the results

printf("Area of the rectangle = %.2f\n", area);

printf("Perimeter of the rectangle = %.2f\n", perimeter);

return 0;

}

### ✅ Sample Output:

Enter the length of the rectangle: 5

Enter the width of the rectangle: 3

Area of the rectangle = 15.00

Perimeter of the rectangle = 16.00

6. **C program to compute Simple Interest**:

#include <stdio.h>

int main() {

float principal, rate, time, simpleInterest;

// Get input from user

printf("Enter principal amount: ");

scanf("%f", &principal);

printf("Enter rate of interest (in %% per year): ");

scanf("%f", &rate);

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

scanf("%f", &time);

// Calculate Simple Interest

simpleInterest = (principal \* rate \* time) / 100;

// Display result

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

return 0;

}

### ✅ Sample Output:

Enter principal amount: 1000

Enter rate of interest (in % per year): 5

Enter time (in years): 2

Simple Interest = 100.00

7. **C program to convert temperature from Celsius to Fahrenheit**:

#include <stdio.h>

int main() {

float celsius, fahrenheit;

// Get temperature in Celsius from user

printf("Enter temperature in Celsius: ");

scanf("%f", &celsius);

// Convert to Fahrenheit

fahrenheit = (celsius \* 9 / 5) + 32;

// Display result

printf("Temperature in Fahrenheit = %.2f\n", fahrenheit);

return 0;

}

### ✅ Sample Output:

Enter temperature in Celsius: 25

Temperature in Fahrenheit = 77.00

8. **C program to find the quotient and remainder** of two integers:

#include <stdio.h>

int main() {

int dividend, divisor, quotient, remainder;

// Get input from user

printf("Enter dividend: ");

scanf("%d", &dividend);

printf("Enter divisor: ");

scanf("%d", &divisor);

// Calculate quotient and remainder

quotient = dividend / divisor;

remainder = dividend % divisor;

// Display results

printf("Quotient = %d\n", quotient);

printf("Remainder = %d\n", remainder);

return 0;

}

### ✅ Sample Output:

Enter dividend: 10

Enter divisor: 3

Quotient = 3

Remainder = 1

9. **C program to check whether a number is even or odd**:

#include <stdio.h>

int main() {

int num;

// Get input from user

printf("Enter an integer: ");

scanf("%d", &num);

// Check if even or odd

if (num % 2 == 0)

printf("%d is Even\n", num);

else

printf("%d is Odd\n", num);

return 0;

}

### ✅ Sample Output:

Enter an integer: 7

7 is Odd

10. **C program to calculate the square and cube of a number**:

#include <stdio.h>

int main() {

int num, square, cube;

// Get input from user

printf("Enter a number: ");

scanf("%d", &num);

// Calculate square and cube

square = num \* num;

cube = num \* num \* num;

// Display results

printf("Square of %d = %d\n", num, square);

printf("Cube of %d = %d\n", num, cube);

return 0;

}

### ✅ Sample Output:

Enter a number: 4

Square of 4 = 16

Cube of 4 = 64