**Assignment**

**C program to add two integers**:

#include <stdio.h>

int main() {

int num1, num2, sum;

// Input two integers from user

printf("Enter first integer: ");

scanf("%d", &num1);

printf("Enter second integer: ");

scanf("%d", &num2);

// Add the two numbers

sum = num1 + num2;

// Display the result

printf("Sum of %d and %d is %d\n", num1, num2, sum);

return 0;

}

### **🧪 Sample Output:**

Enter first integer: 5

Enter second integer: 10

Sum of 5 and 10 is 15

2. **C program to swap two numbers using a temporary variable**:

#include <stdio.h>

int main() {

int a, b, temp;

// Input two numbers

printf("Enter first number (a): ");

scanf("%d", &a);

printf("Enter second number (b): ");

scanf("%d", &b);

// Display before swapping

printf("Before swapping: a = %d, b = %d\n", a, b);

// Swap using temporary variable

temp = a;

a = b;

b = temp;

// Display after swapping

printf("After swapping: a = %d, b = %d\n", a, b);

return 0;

}

### **🔁 Sample Output:**

Enter first number (a): 5

Enter second number (b): 10

Before swapping: a = 5, b = 10

After swapping: a = 10, b = 5

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

#include <stdio.h>

int main() {

int a, b;

// Input two numbers

printf("Enter first number (a): ");

scanf("%d", &a);

printf("Enter second number (b): ");

scanf("%d", &b);

// Display before swapping

printf("Before swapping: a = %d, b = %d\n", a, b);

// Swap without using a temporary variable

a = a + b;

b = a - b;

a = a - b;

// Display after swapping

printf("After swapping: a = %d, b = %d\n", a, b);

return 0;

}

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### **🧪 Sample Output:**

Enter first number (a): 4

Enter second number (b): 7

Before swapping: a = 4, b = 7

After swapping: a = 7, b = 4

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

#include <stdio.h>

int main() {

char ch;

// Input a character 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;

// Input length and width

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 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;

// Input principal, rate, and time

printf("Enter the principal amount: ");

scanf("%f", &principal);

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

scanf("%f", &rate);

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

scanf("%f", &time);

// Calculate simple interest

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

// Display the result

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

return 0;

}

### **🧪 Sample Output:**

Enter the principal amount: 1000

Enter the rate of interest (in %): 5

Enter the 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;

// Input temperature in Celsius

printf("Enter temperature in Celsius: ");

scanf("%f", &celsius);

// Convert to Fahrenheit

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

// Display the 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 remainder and quotient of two integers**:

#include <stdio.h>

int main() {

int dividend, divisor, quotient, remainder;

// Input two integers

printf("Enter the dividend: ");

scanf("%d", &dividend);

printf("Enter the divisor: ");

scanf("%d", &divisor);

// Calculate quotient and remainder

quotient = dividend / divisor;

remainder = dividend % divisor;

// Display the result

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

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

return 0;

}

### **🧪 Sample Output:**

Enter the dividend: 17

Enter the divisor: 5

Quotient = 3

Remainder = 2

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

#include <stdio.h>

int main() {

int number;

// Input a number from the user

printf("Enter an integer: ");

scanf("%d", &number);

// Check even or odd using modulus operator

if (number % 2 == 0)

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

else

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

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 number, square, cube;

// Input a number from the user

printf("Enter a number: ");

scanf("%d", &number);

// Calculate square and cube

square = number \* number;

cube = number \* number \* number;

// Display the results

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

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

return 0;

}

### **🧪 Sample Output:**

Enter a number: 4

Square of 4 = 16

Cube of 4 = 64