DAY 2-8-25

BASIC INPUT AND OUTPUT OPERATORS

1. Write a C program to add two integers.

IPO:

Input: Two integers (a, b)  
Process: sum = a + b  
Output: Sum of the two integers

Code:

#include <stdio.h>

Void main()

{

int a, b, sum;

scanf("%d %d", &a, &b);

sum = a + b;

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

}

Output:

A black background with a black square

AI-generated content may be incorrect.

1. Write a program to swap two numbers using a temporary variable.

IPO:

Input: Two integers (a, b)  
Process: Use temp variable c → c = a; a = b; b = c  
Output: Values of a and b after swapping

Code:

#include <stdio.h>

void main()

{

int a, b, c;

scanf("%d %d", &a, &b);

c= a;

a = b;

b = c;

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

}

Output:

A black background with white numbers and a black background

AI-generated content may be incorrect.

1. Write a program to swap two numbers without using a temporary variable.

IPO:

Input: Two integers (a, b)  
Process: a = a + b; b = a - b; a = a - b  
Output: Values of a and b after swapping

Code:

#include <stdio.h>

void main()

{

int a, b;

scanf("%d %d", &a, &b);

a = a + b;

b = a - b;

a = a - b;

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

}

Output:

A black background with white text

AI-generated content may be incorrect.

1. Write a program to find the ASCII value of a character.

IPO:

Input: A character (ch)

Process: Get ASCII by printing integer value of ch

Output: ASCII value of the character

Code:

#include <stdio.h>

void main()

{

char ch;

scanf(" %c", &ch);

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

}

Output:

A black background with white text

AI-generated content may be incorrect.

1. Write a program to calculate the area and perimeter of a rectangle.

IPO:

Input: Length (l) and Width (w) as float  
Process: area = l × w; perimeter = 2 × (l + w)  
Output: Area and Perimeter

Code:

#include <stdio.h>

void main()

{

float l, w, a, p;

scanf("%f %f", &l, &w);

a = l \* w;

p = 2 \* (l+ w);

printf("A = %.2f\n P = %.2f\n", a, p);

}

Output:

A black background with white numbers

AI-generated content may be incorrect.

1. Write a program to compute the simple interest.

IPO:

Input: Principal (p), Rate (r), Time (t)

Process: si = (p × r × t) / 100

Output: Simple Interest

Code:

#include <stdio.h>

void main()

{

float p, r, t, si;

scanf("%f %f %f", &p, &r, &t);

si= (p \* r \* t) / 100;

printf("Simple Interest = %.2f",si);

}

Output:

A black background with white text

AI-generated content may be incorrect.

1. Write a program to convert temperature from Celsius to Fahrenheit.

IPO:

Input: Temperature in Celsius

Process: fahrenheit = (celsius × 9 / 5) + 32

Output: Temperature in Fahrenheit

Code:

#include <stdio.h>

void main()

{

float celsius, fahrenheit;

scanf("%f", &celsius);

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

printf("Fahrenheit = %f", fahrenheit);

}

Output:

A number and equal sign

AI-generated content may be incorrect.

1. Write a program to find the quotient and remainder of two integers.

IPO:

Input: Two integers (a and b or dividend and divisor)

🡒 Process: quotient = a / b; remainder = a % b

🡒 Output: Quotient and Remainder

Code:

#include <stdio.h>

void main()

{

Int a,b, quotient, remainder;

scanf("%d %d", &dividend, &divisor);

quotient =a/b;

remainder =a%b;

printf("Quotient = %d Remainder = %d", quotient, remainder);

}

Output:

A black background with white text

AI-generated content may be incorrect.

1. Write a program to check whether a number is even or odd.

IPO:

Input: An integer (num)

Process: Check if num % 2 == 0

Output: "Even" if true, otherwise "Odd"

Code:

#include <stdio.h>

void main()

{

int num;

scanf("%d", &num);

if (num % 2 == 0)

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

else

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

}

Output:

A black background with white text

AI-generated content may be incorrect.

1. Write a program to calculate the square and cube of a number.

IPO:

Input: An integer (num)

Process: square = num × num; cube = num × num × num

Output: Square and Cube

Code:

#include <stdio.h>

void main()

{

int num, s, c;

scanf("%d", &num);

s = num \* num;

c = num \* num \* num;

printf("Square = %d\nCube = %d\n", s, c);

}

Output:

A black background with white numbers and symbols

AI-generated content may be incorrect.