DAY 2-8-25

BASIC INPUT AND OUTPUT OPERATORS

1. Write a C program to add two integers.

Ipo

Input: Assing two numbers

Process: add the given numbers

Output:sum

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=5

b=3

Sum=8

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

IPO

Input: Assing 2 numbers and temp variable

Process: swap their values

Output: exchanged values

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:

12

24

a=24,b=12

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

IPO:

Input: read two number a,b

Process:swap numbers using arithmetic operator's

Output: exchanged values

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:

25

87

a=87,b=25

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

IPO:

Input: enter a character.

Process: find the ASCII value of the character.

Output: ASCII value

Code:

#include <stdio.h>

void main()

{

char ch;

scanf(" %c", &ch);

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

}

Output:

C

ASCII value is 99

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

IPO:

Input: enter the measurements

Process: use area and perimeter formula

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("Area = %.4f\n Perimeter= %.4f\n", a, p);

}

Output:

3

5

Area = 15.0000

Perimeter = 16.0000

1. Write a program to compute the simple interest.

IPO

Input: Enter the values

Process: use formula (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 = %.4f",si);

}

Output:

400

18

50

Simple Interest = 3,600.0000

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

IPO

Input: enter the values

Process: use (c\*9/5)+32

Code:

#include <stdio.h>

void main()

{

float c, f;

scanf("%f", &c);

f = (c \* 9 / 5) + 32;

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

}

Output:

9

Fahrenheit = 42.2

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

IPO

Input: enter two number

Process: q=a/b and r=a%b

Output: remainder and quotient

Code:

#include <stdio.h>

void main()

{

Int a,b, q, r;

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

quotient =a/b;

remainder =a%b;

printf("Quotient = %d Remainder = %d", q, r);

}

Output:

10

5

Quotient = 2, Remainder = 0

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

IPO

Input: enter a number

Process: divide by two is remainder is 0 it is even else odd

Output: even or odd

Code:

#include <stdio.h>

void main()

{

int num;

scanf("%d", &num);

if (num % 2 == 0)

printf("It is a even number");

else

printf("It is odd number");

}

Output:

12

It is a even number

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

IPO

Input: enter a number

Process: s= number\*number and c= num\*num\*num

Output: square and cube of a number

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:

3

Square = 9

Cube = 27