Assignment 2

Operators in C Language

#include <stdio.h>

int main() {

int num, num2, num3, a, b, temp, digit;

char ch;

float f;

double d;

// 1. Print unit digit of a given number

printf("Enter a number: ");

scanf("%d", &num);

int unit\_digit = num % 10;

printf("Unit digit: %d\n", unit\_digit);

// 2. Print a given number without its last digit

num2 = num / 10;

printf("\nNumber without the last digit: %d\n\n", num2);

// 3. Swap values of two int variables

printf("Enter two integers to swap: ");

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

temp = a;

a = b;

b = temp;

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

// 4. Swap values of two int variables without using a third variable

printf("Enter two integers to swap without a third variable: ");

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

a = a + b;

b = a - b;

a = a - b;

printf("Swapped values without a third variable: a = %d, b = %d\n\n", a, b);

// 5. Input a three-digit number and display the sum of the digits

printf("Enter a three-digit number: ");

scanf("%d", &num3);

int sum\_of\_digits = (num3 % 10) + ((num3 / 10) % 10) + (num3 / 100);

printf("Sum of the digits: %d\n\n", sum\_of\_digits);

// 6. Take a character as input and display its ASCII code

printf("Enter a character: ");

scanf(" %c", &ch);

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

// 7. Find the position of the first 1 in LSB

printf("Enter a number: ");

scanf("%d", &num);

int position = 0;

while (!(num & 1)) {

num >>= 1;

position++;

}

printf("Position of the first 1 in LSB: %d\n\n", position);

// 8. Check whether the given number is even or odd using bitwise operator

printf("Enter a number: ");

scanf("%d", &num);

if (num & 1) {

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

} else {

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

}

// 9. Print the size of int, float, char, and double variables

printf("Size of int: %lu bytes\n", sizeof(int));

printf("Size of float: %lu bytes\n", sizeof(float));

printf("Size of char: %lu bytes\n", sizeof(char));

printf("Size of double: %lu bytes\n\n", sizeof(double));

// 10. Make the last digit of a number stored in a variable as zero

printf("Enter a number: ");

scanf("%d", &num);

num = (num / 10) \* 10;

printf("Number with last digit as zero: %d\n\n", num);

// 11. Input a number and a digit, append the digit to the number

printf("Enter a number: ");

scanf("%d", &num);

printf("Enter a digit to append: ");

scanf("%d", &digit);

num = (num \* 10) + digit;

printf("Resulting number: %d\n\n", num);

// 12. Convert INR to USD

float inr, usd;

printf("Enter an amount in INR: ");

scanf("%f", &inr);

usd = inr / 76.23;

printf("Equivalent amount in USD: %.2f\n\n", usd);

// 13. Rotate the digits of a three-digit number to the right

printf("Enter a three-digit number: ");

scanf("%d", &num);

int last\_digit = num % 10;

num = num / 10 + (last\_digit \* 100);

printf("Rotated number: %d\n", num);

return 0;

}



