program to differentiate pass by value and pass by reference by swapping two numbers using function

#include <stdio.h>

void swapByValue(int a, int b);

void swapByReference(int \*a, int \*b);

int main() {

int num1, num2;

printf("Enter the first number: ");

scanf("%d", &num1);

printf("Enter the second number: ");

scanf("%d", &num2);

printf("\nOriginal Values:\n");

printf("Number 1: %d\n", num1);

printf("Number 2: %d\n", num2);

printf("\nAfter Swap by Value:\n");

swapByValue(num1, num2);

printf("Number 1: %d\n", num1);

printf("Number 2: %d\n", num2);

printf("\nAfter Swap by Reference:\n");

swapByReference(&num1, &num2);

printf("Number 1: %d\n", num1);

printf("Number 2: %d\n", num2);

return 0;

}

void swapByValue(int a, int b) {

int temp = a;

a = b;

b = temp;

}

void swapByReference(int \*a, int \*b) {

int temp = \*a;

\*a = \*b;

\*b = temp;

}