DECIMAL TO HEXADECIMAL CONVERSION

EXP NO: 28

AIM: To write a C program to implement decimal to hexadecimal conversion.

ALGORITHM:

1. Start from the decimal number.

2. Divide the number by 16 and keep track of the remainder.

3. The remainder gives the hexadecimal equivalent for that digit. (0=0, 1=1, 2=2, ... 9=9, 10=A, 11=B, 12=C, 13=D, 14=E, 15=F)

4. Repeat the division by 16 until the quotient becomes 0.

5. Write the remainders in reverse order to get the hexadecimal number.

PROGRAM:

```c
#include <stdio.h>

int main() {

  int n

  // Prompt the user to enter a decimal number

  printf("Enter the decimal number: ");

  scanf("%d", &n);  // %d is used to input a decimal number

  // Display the corresponding hexadecimal value

  printf("The hexadecimal value is: %X\n", n);  // %X outputs a hexadecimal value

  return 0;

}
```
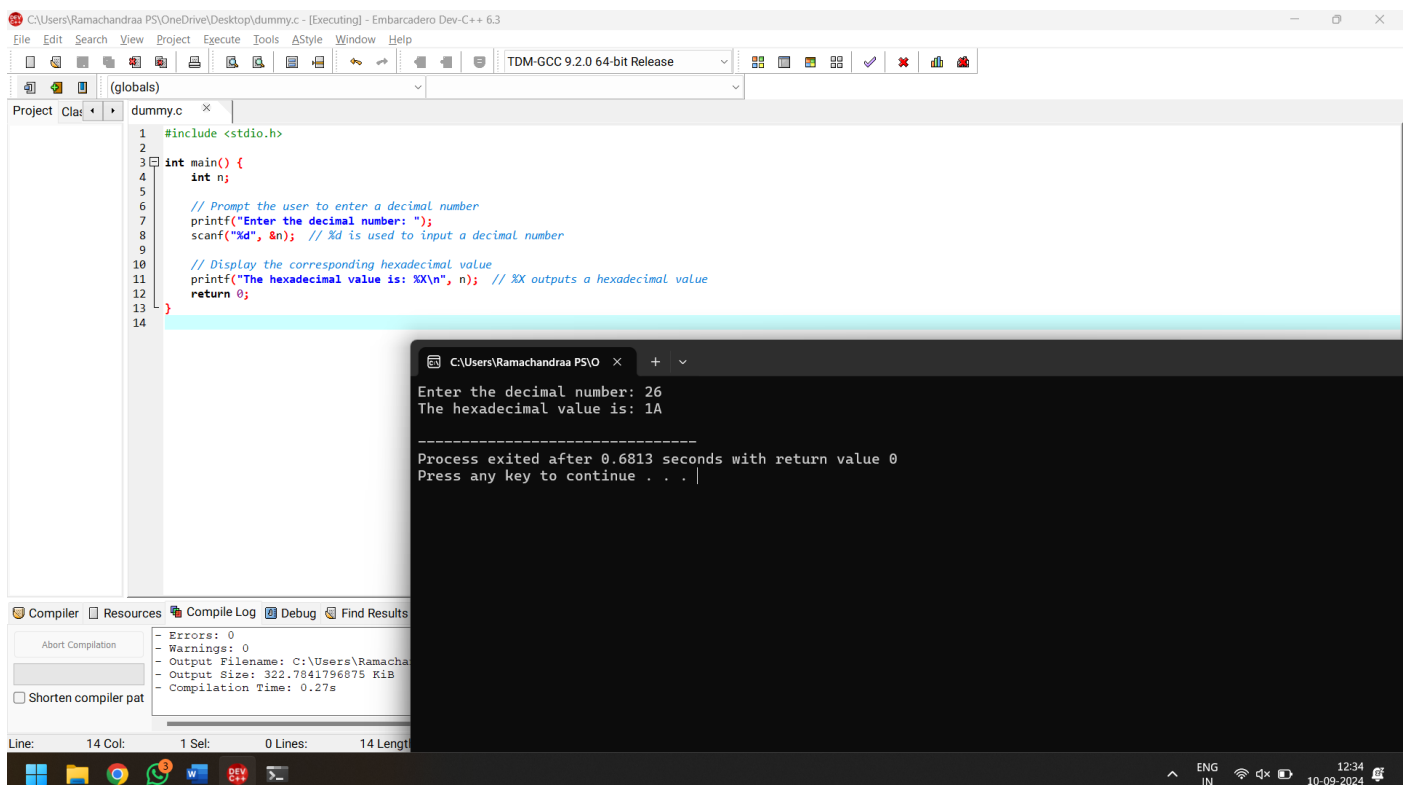
INPUT & OUTPUT:

RESULT: Thus, the program was executed successfully using DevC++.