

DECIMAL TO OCTAL CONVERSION

EXP NO: 29

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

ALGORITHM:

- 1) Store the remainder when the number is divided by 8 in an array.
- 2) Divide the number by 8 now
- 3) Repeat the above two steps until the number is not equal to 0.
- 4) Print the array in reverse order now.

PROGRAM:

```
#include<stdio.h>
```

```
Int main()
```

```
{
```

```
long decimal, remainder, quotient, octal=0;
```

```
int octalnum[100], i = 1, j;
```

```
printf("Enter the decimal number:");
```

```
scanf("%ld", &decimal);
```

```
quotient = decimal;
```

```
while (quotient != 0)
```

```
{
```

```
octalnum[i++] = quotient % 8;
```

```
quotient = quotient / 8;
```

```
}
```

```
for (j = i - 1; j > 0; j--)
```

```
octal= octal*10 + octalnum[j];
```

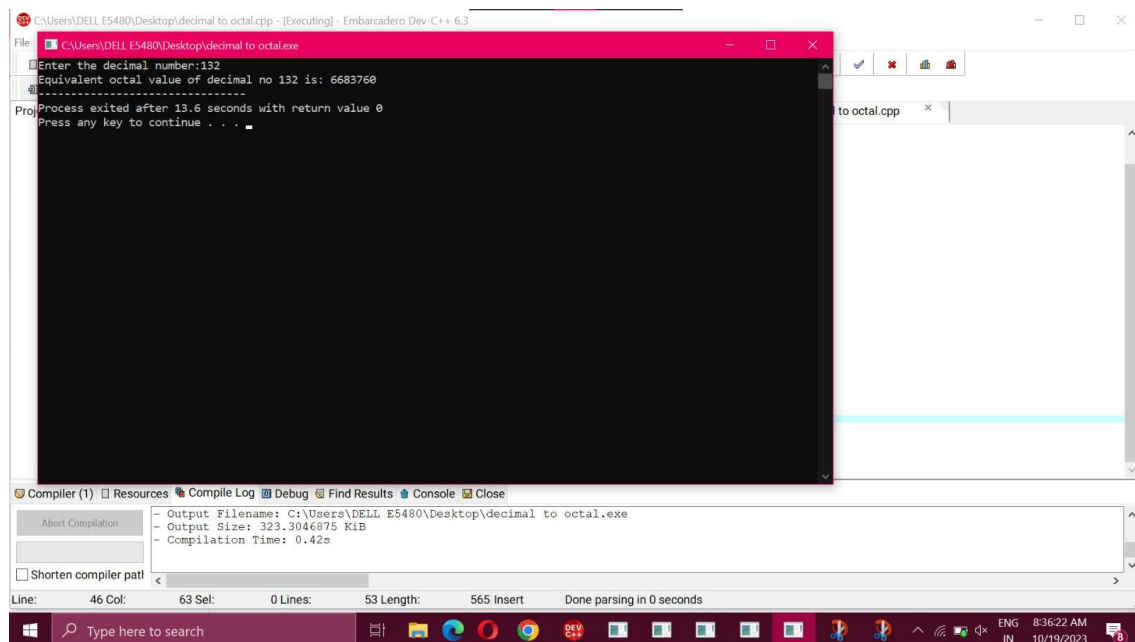
```
printf("Equivalent octal value of decimal no %d is: %d ", decimal,octalnum);
```

```
return 0;
```

```
}
```

INPUT:

OUTPUT:



RESULT: Thus

the program was executed successfully using DevC++.