**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/OUTPUT SS:**

decimal to octal.cpp

```c
#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;
}
```

```
C:\Users\praba\OneDrive\Des
Enter the decimal number:32.2
Equivalent octal value of decimal no 32 is: 6683760
--------------------------------
Process exited after 2.613 seconds with return value 0
Press any key to continue . . .
```

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