

### **Exp. No. 17**

Write a LEX program to print all the constants in the given C source program file.

**Program:** (countconstants.l)

```
digit [0-9]
%{
int cons=0;
%}
%%
{digit}+ { cons++; printf("%s is a constant\n", yytext); }
.\n { }
%%
int yywrap(void) {
return 1; }
int main(void)
{
FILE *f;
char file[10];
printf("Enter File Name : ");
scanf("%s",file);
f = fopen(file,"r");
yyin = f;
yylex();
printf("Number of Constants : %d\n", cons);
fclose(yyin);
}
```

**Input Source Program:** (sample.c)

```
#define PI 3.14
#include<stdio.h> #include<conio.h>
void main()
{
    int a,b,c = 30;
    printf("hello");
}
```

**OUTPUT:**

Microsoft Windows [Version 10.0.22621.2715]  
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C:\Users\Deepak>d:

D:\>cd Slots

D:\Slots>cd Compiler Design

D:\Slots\Compiler Design>flex Ex2Constants.l

D:\Slots\Compiler Design>gcc lex.yy.c

D:\Slots\Compiler Design>a.exe Ex2Constants.c

Enter File Name : Ex2Constants

.c

Number of Constants : 0

^C

D:\Slots\Compiler Design>a.exe Ex2Constants.c

Enter File Name : Ex2Constants.c

314 is a constant

30 is a constant

Number of Constants : 2

D:\Slots\Compiler Design>|