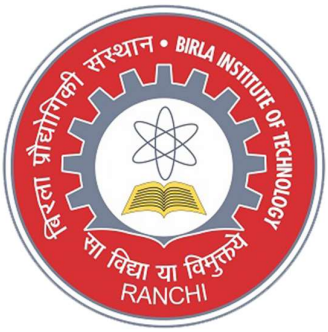
Birla Institute of Technology,Mesra,
Patna Campus



CD-LabQuiz

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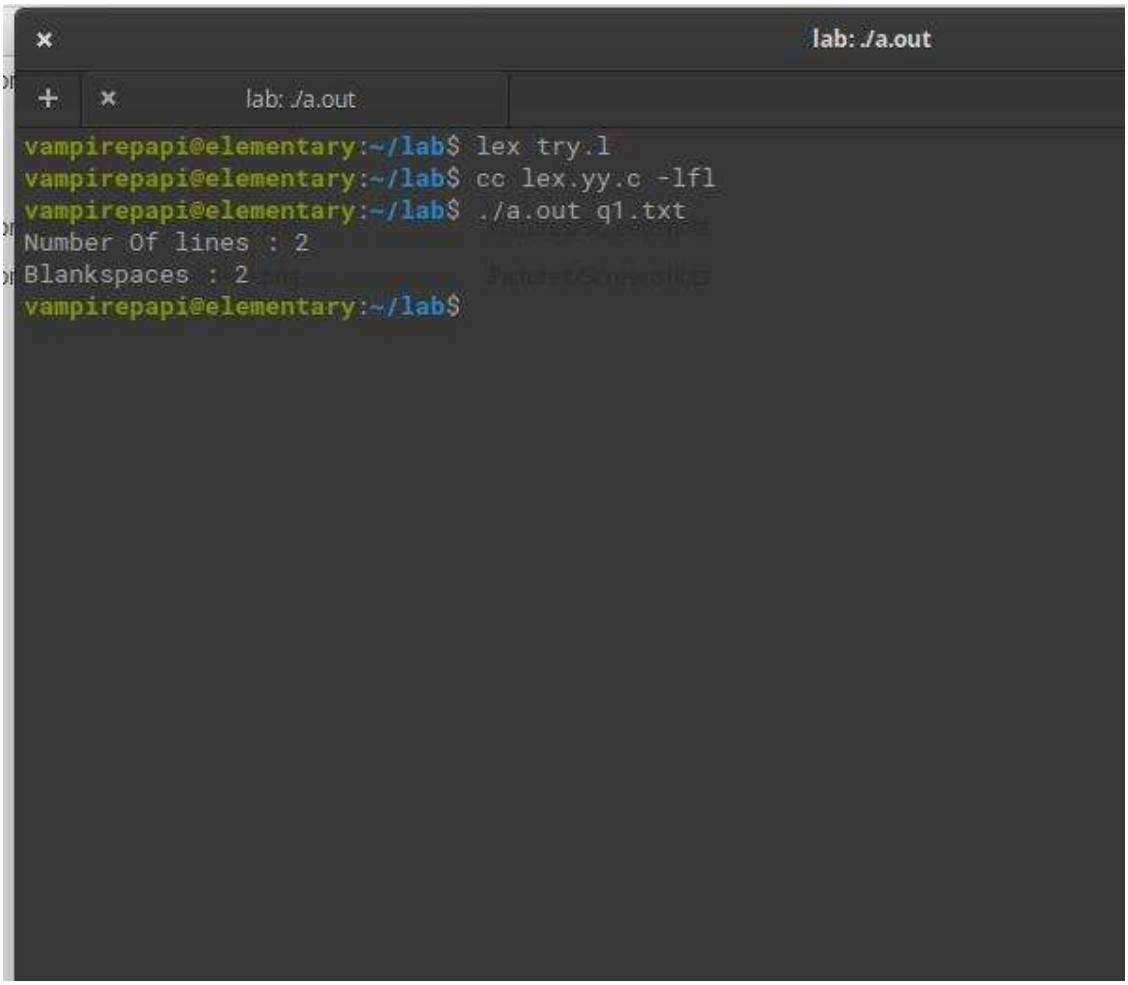
Sec-CSE 6th

Q1. Write the program in Lex to count no of lines andblank spaces of that file.

Code:-

```
%{
#include<stdio.h>
int word=0,character=0,space=0,lines=0;
%}
%%
[A-Za-z|0-9]+ {word++;character=character+strlen(yytext);}
. {character++;}
\n {lines++;character++;}
[ \n\t\r]+ {space++;}
%%
int main(int agrc,char **argv)
{
yyin=fopen(argv[1],"r");
yylex();
printf("Number Of lines : %d\n",lines);
printf("Blank spaces : %d\n",space);
}
```

Output:-



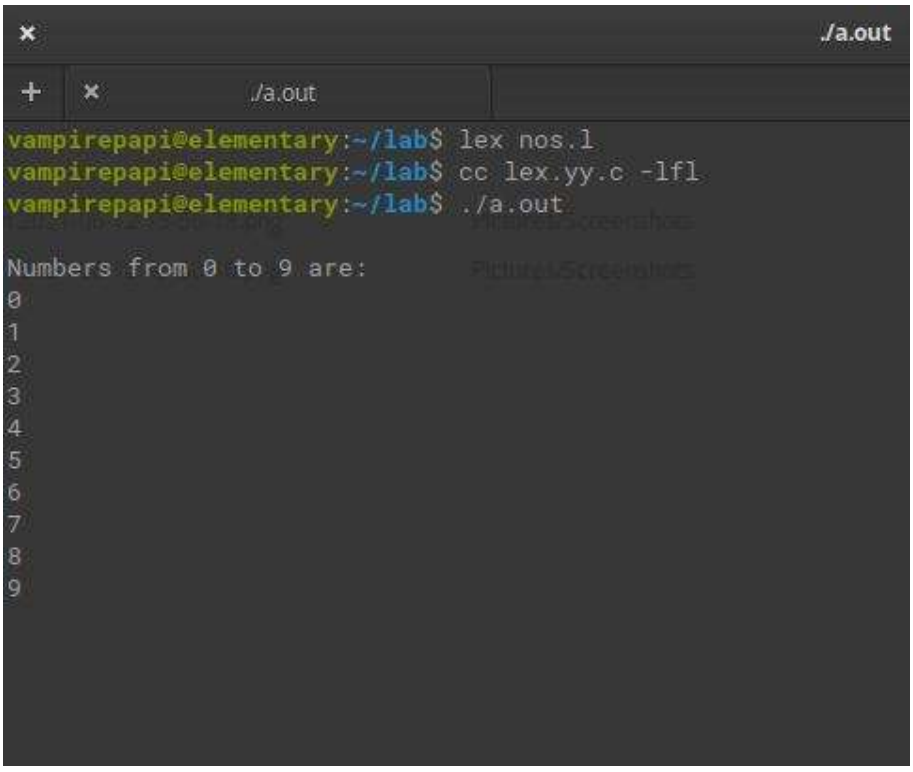
Q2. Write the program in Lex todisplay number 0 to 9.

Code:-

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

```
%}

/* rules */

%%

[\n] {printf("Numbers from 0 to 9 are:
\n0\n1\n2\n3\n4\n5\n6\n7\n8\n9\n"); }


%%

/* code (main) */

int main()

{

        yylex();

        return 0;

}
```

Output:-



Q3. Writethe program in C using file handling to count number of vowels of afilein whichwordstart from alphabet --t.

Code:-

```
#include <stdio.h>
//c program
//to count
//no. of vowels

int main() {
  FILE *fp;
  char* file = "C:\\Users\\vampirepapi\\Desktop\\nowhere\\Codes\\Cpp\\test.txt";
  unsigned short vowels = 0;
  char c;

  fp = fopen(file, "r"); // 'r' opens the file in read mode

  //printf("READING THE CONTENTS OF THE FILE [ %s ]\n", file);

  while((c = fgetc(fp)) != EOF) {
    if(c == 'a' || c == 'A' || c == 'e' || c == 'E' || c == 'i' || c == 'I' || c == 'o' || c == 'O' || c == 'u' || c == 'U') {
      vowels++;
    }
```

```
//      printf("%c", c);
  }

  printf("\n");

  printf("NUMBER OF VOWELS: %hu \n", vowels);

  fclose(fp);
  return 0;
}
```

Output:-

Q4.Write the program in C using file handling to count number of vowelswith line numbers.

Code:-

```
#include<process.h>
#include <stdio.h>
void main(int argc, char *argv[])
{


   FILE *fp;


   char* file =
"C:\\Users\\vampirepapi\\Desktop\\nowhere\\Codes\\Cpp\\test.txt";


   char c;


   fp = fopen(file, "r");
   int line = 1;
   while ((c = fgetc(fp)) != EOF)
   {
      int vowel = 0;
      if ((c == 'a') || (c == 'A') || (c == 'e') || (c == 'E') || (c == 'i') || (c == 'I') || (c
== 'o') || (c == 'O') || (c == 'u') || (c == 'U'))
      {
         vowel++;
```

```
        }
        if (c == '\n') {
            printf("\n Number of vowels in line %d are = %d", line, vowel);
            line++;
        }
        c = fgetc(fp);
    }

}
```

Output:-