Name….. **LAB-** **16JE00…..**

Q1. WAP to to take another C program as an input and store it in a file.

//Code

```
#include<bits/stdc++.h>
using namespace std;

int main()
{
	ofstream fout;
	fout.open("code.c");
	string s;
	if(fout==NULL)
	{
		printf("Unable to create a file.\n");
		return 0;
	}
	cout<<"Enter exit to terminate:\n";
	while(1)
	{
		cin>>s;
		if(s=="exit")
			break;
		fout<<s<<" ";
	}
	cout<<"File Created Successfully.\n";
	fout.close();
	return 0;
}
```

OUTPUT:

```
Enter exit to terminate:
#include<stdio.h>
int main()
{
printf("hello");
}
exit
File Created Successfully.

--------------------------------
Process exited after 20.03 seconds with return value 0
Press any key to continue . . .
```

Q2. WAP to to count the number of lines in the stored program.

//Code

```
#include<stdio.h>
int main()
{
	FILE *f=fopen("code.c","r");
	char *ch[1024];
	int count=0;
	if(f==NULL)
	{
		printf("Unable to Open a file.\n");
		return 0;
	}
	while(fgets(ch, 1024, f) != NULL)
	{
		printf("%s",ch);
		count++;
	}
	fclose(f);
	printf("\nNumber of lines in the file are = %d.\n",count);
	return 0;
}
```

OUTPUT:

```
#include<stdio.h>
int main()
{
        printf("hello");
}
Number of lines in the file are = 5.

--------------------------------
Process exited after 0.08515 seconds with return value 0
Press any key to continue . . .
```

Q3. WAP to count no. of different operators in stored file.

//Code

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

int main()
{
	FILE *f=fopen("code.c","r+");
	char ch;
	int i,count=0;
	bool op[5];
	for(i=0;i<5;i++)
		op[i]=0;
```

```
        if(f==NULL)
        {
                printf("Unable to Open a file.\n");
                return 0;
        }
        while((ch=fgetc(f))!=EOF)
        {
                printf("%c",ch);
                if(ch=='+')
                        op[0]=1;
                else if(ch=='-')
                        op[1]=1;
                else if(ch=='*')
                        op[2]=1;
                else if(ch=='/')
                        op[3]=1;
                else if(ch=='%')
                        op[4]=1;
        }
        fclose(f);
        for(i=0;i<5;i++)
                if(op[i]==1)
                        count++;
        printf("\nNumber of Different Operators are = %d.\n",count);
        return 0;
}
```

OUTPUT:

```
#include<stdio.h>
int main()
{
        printf("hello");
        int a=2,b,c=0;
        b=a+a*a/b+c;
}
Number of Different Operators are = 3.

--------------------------------
Process exited after 0.1112 seconds with return value 0
Press any key to continue . . .
```

Q4. WAP to remove all the blank spaces,tabs and newline command from the stored program and write them into another file.

//Code

```
#include <stdio.h>
int main()
{
   FILE *f=fopen("code.c","r"), *f1=fopen("newcode.c","w");
   int c = 0,count = 0;

   if(f==NULL)
   {
```

```
    printf("Unable to open file.\n");
    return 0;
  }
  for(c = getc(f);c!=EOF;c=getc(f))
  {
    if (c==' '||c=='\t'||c=='\n')
                    continue;
            else
                    fputc(c,f1);
        }
  fclose(f);
  printf("The file has been saved without newline , tab and white spaces.\n");
  return 0;
}
```

OUTPUT:

```
The file has been saved without newline , tab and white spaces.

--------------------------------
Process exited after 0.08483 seconds with return value 0
Press any key to continue . . .
```

Q5. WAP to check the single line and multiple line commentin the privous program.

//Code

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

int main()
{
        FILE *f=fopen("code.c","r");
        if(f==NULL)
        {
                printf("Unable to open the file.\n");
                return 0;
        }
        char curr,old;
        int res=0;
        bool prev=0;
        while((curr=fgetc(f))!=EOF)
        {
                printf("%c",curr);
                if(!prev)
                {
                        prev=1;
                        old=curr;
                }
                else if(res==0 && (old==47 && curr==47))
                        res=1;
                else if(res==0 && (old==47 && curr=='*'))
                        res=2;
                else
                        old=curr;
        }
```

```
        if(res==1)
                printf("\nSingle Line Comment Found.\n");
        else if(res==2)
                printf("\nMultiLine Comment Found.\n");
        else
                printf("\nNo Comment Found in the code.\n");
        return 0;
}
```

OUTPUT:

```
#include<stdio.h>
int main()
{
//This is a program.
        printf("hello");
        int a=2,b,c=0;
        b=a+a*a/b+c;
}
Single Line Comment Found.

--------------------------------
Process exited after 0.1365 seconds with return value 0
Press any key to continue . . .
```