Exercise 1 – *Write a program to print the content of an existing file and also count the number of tabs, lines, spaces and total number of characters of that file.*

Program –

```
#include<stdio.h>
int main ()
{
      FILE *fptr;
      char filename[100], c;
      int num_lines=0, num_tabs=0, num_spaces=0,
      num_characters=0;
      printf("Enter filename to open : ");
      scanf("%s",filename);
      fptr = fopen(filename, "r");
      c = fgetc(fptr);
      while(c!=EOF)
      {
            printf("%c",c);
            c = fgetc(fptr);
            if (c == '\n')
            {
                  num_lines += 1;
            }
            if (c == '\t')
            {
                  num_tabs += 1;
            }
            if (c == ' ')
            {
                  num_spaces += 1;
            }
            else
            {
                  num_characters += 1;
            }
      }
      printf("\nNo. of tabs = %d",num_tabs);
      printf("\nNo. of spaces = %d",num_spaces);
      printf("\nNo. of lines = %d",num_lines);
      printf("\nNo. of characters = %d",num_characters);
      fclose(fptr);
      return 0;
}
```

Exercise 2 – *Write a program to accept name and age of N number of persons and write the name of those persons into a 'name.txt' file whose age(s) is/are above 16.*

Program –

```
#include <stdio.h>
int main ()
{
      FILE *fptr;
      char name[20];
      int n, age;
      fptr = fopen("name.txt", "w");
      printf("Enter no. of people: ");
      scanf("%d",&n);
      for (int i=0; i<n; i++)
      {
            printf("Enter name and age: ");
            scanf("%s %d",name,&age);
            if (age>16)
            {
                        fprintf(fptr, "Name = %s\n", name);
                        fprintf(fptr, "Age = %d\n", age);
            }
      }
      fclose(fptr);
      return 0;
}
```

Exercise 3– *Write a program to copy the content of one file to another file using command line argument.*

Program –

```
#include <stdio.h>
int main ()
{
      FILE *fptr1, *fptr2;
      char filename[100], c;
      printf("Enter filename to open for reading: ");
      scanf("%s",filename);
      fptr1 = fopen(filename, "r");

      printf("Enter filename to open for writing: ");
      scanf("%s", filename);
      fptr2 = fopen(filename, "w");
      c = fgetc(fptr1);
      while (c!=EOF)
      {
            fputc(c, fptr2);
            c = fgetc(fptr1);
      }
```

```
        printf("\nContents copied to %s",filename);
        fclose(fptr1);
        fclose(fptr2);
        return 0;
}
```

Exercise 4– *Write a program to merge the content of two source files to another file using command line argument.*

Program –

```
#include <stdio.h>
int main ()
{
        char filename1[100], filename2[100], filename3[100], c;
        FILE *fptr1, *fptr2, *fptr3;
        printf ("Enter the two filenames for reading: ");
        scanf("%s%s",filename1,filename2);
        fptr1 = fopen(filename1, "r");
        fptr2 = fopen(filename2, "r");
        printf("Enter the filename for writing: ");
        scanf("%s",filename3);
        fptr3 = fopen(filename3, "w");
        while((c = fgetc(fptr1)) != EOF)
        fputc(c, fptr3);

        while((c = fgetc(fptr2)) != EOF)
        fputc(c, fptr3);
        printf("Merged %s and %s into %s",filename1,filename2,
        filename3);
        fclose(fptr1);
        fclose(fptr2);
        fclose(fptr3);
        return 0;
}
```