LAB ASSIGNMENT 18

1)Reversal of words: Assume that you are provided with an input text file (ip.txt) which contains a few lines from a poem. The task is to read the file and reverse all the words present in it. The output must be stored in an output file, say, op.txt.

Example:

Input:

Miles to go before I sleep

Miles to go before I sleep

Output:

seliM ot og erofeb I peels

seliM ot og erofeb I peels

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

int main()
{
   char buf[100], str[100], temp;
   char rev[100][200], ch;
   int line = 0, i = 0, j=0, len;
   FILE *fptr;

   FILE* fp = fopen("ip.txt", "r");
```

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```
if (fp == NULL) {
   printf("Unable to open file\n");
   return -1;
}

while ((ch=fgetc(fp))!=EOF) {
   if(ch=='\n')
   line++;//counting lines
}


// Move the pointer back to 0th index
rewind(fp);

printf("\nContent of ip.txt: \n");
for (i=0;i<line;i++) {
   fgets(buf, sizeof(buf), fp);
   strcpy(rev[i],buf);
   printf("%s", buf);
}

fclose(fp);
```

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```
fptr=fopen("op.txt","w");

if (fptr == NULL) {
   printf("\nUnable to open file");
   return -1;
}

printf("\n\nContent of op.txt: ");
while(j<line){

   strcpy(str,rev[j]);
   len=strlen(str);
   for (i = 0; i < len/2; i++)
{
   // temp variable use to temporary hold the string
   temp = str[i];
   str[i] = str[len - i - 1];
   str[len - i - 1] = temp;
}
   fprintf(fptr,"%s",str);
   printf("%s",str);
   j++;
}
```

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```
    fclose(fptr);

    return 0;
}
```

2)Reversal of lines: Assume that you are provided with an input text file (ip.txt) which contains a few lines from a poem. The task is to read the file and reverse all the position of the words present in it. The output must be stored in an output file, say, op.txt.

Example:

Input:

Miles to go before I sleep

Miles to go before I sleep

Output:

sleep I before go to Miles

sleep I before go to Miles

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

void reverse(char str[], FILE *fptr)
{
    int i,j,len,startIndex, endIndex;
```

```
len = strlen(str);
    endIndex = len - 1;

for(i = len - 1; i >= 0; i--)
    {
        if(str[i] == ' ' || i == 0)
        {
            if(i == 0)
            {
                startIndex = 0;
            }
            else
            {
                startIndex = i + 1;
            }
            for(j = startIndex; j <= endIndex; j++)
            {
               fprintf(fptr,"%c",str[j]);
                printf("%c", str[j]);
            }
            endIndex = i - 1;
            fprintf(fptr," ");
            printf(" ");
        }
```

```
        }

}

int main()
{
   char buf[100], str[100];
   char arr[100][100], ch;
   int line = 0, i = 0;
   FILE *fptr;

   FILE* fp = fopen("ip.txt", "r");

   if (fp == NULL) {
      printf("Unable to open file\n");
      return -1;
   }

   while ((ch=fgetc(fp))!=EOF) {
      if(ch=='\n')
      line++;//counting lines
   }
```

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```
// Move the pointer back to 0th index
rewind(fp);

printf("\nContent of ip.txt: \n");
for (i=0;i<line;i++) {
   fgets(buf, sizeof(buf), fp);
   strcpy(arr[i],buf);
   printf("%s", buf);
}

fclose(fp);

fptr=fopen("op.txt","w");

if (fptr == NULL) {
   printf("\nUnable to open file");
   return -1;
}

printf("\n\nContent of op.txt:\n ");
for(i=0;i<line;i++)
{

strcpy(str,arr[i]);
```

```
        reverse(str, fptr);
        //fprintf(fptr,"\n");
        //printf("\n");

    }

   fclose(fptr);

    return 0;
}
```

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