Reading string data from a file

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

int main()
{
   FILE *fp;

   char c[50],itemname[10][50];
   int qty[10];
   double price[10], cost[10];
   double totalcost = 0.0;
   int  n = 0;

      fp = fopen("E:/kroger3.txt", "r");                    //open the file to read...

  while (!feof(fp))
   {
       fscanf(fp,"%s[^\n]",c);
         strcpy(itemname[n],c);                    //copy the buffer to string array

      fscanf(fp, "%d", &qty[n]);
      fscanf(fp, "%lf", &price[n]);
        n = n + 1;
   }
     fclose(fp);

     n = n - 1;              //update value of data sets from the file

   printf("\n==> Data accessed from input file.....\n");
```

Code fragment to implement linear search with strings

```
printf("\nEnter the city to search\n");
  scanf("%s", key);

  for (c = 0; c < n; c++)
  {
    if (strcmp(city[c], key) == 0)              // string comparision.....
    {
      printf("\n%s is present at index %d, means position %d\n", key, c, c+1);
      break;
    }
  }
```

```
  if (c == n)
    printf("\n%s is not present in array.\n", key);
```

User input from keybaord for strings

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

#define SIZE 5

int main()
{
        int i,j;
        char *names[SIZE];
        char *temp[SIZE];

//get the names of the cities from keybaord....

        puts("Enter names of cities \n");

        for (i = 0; i < SIZE; i++)
        {
                names[i]=malloc(100);
                fgets( names[i], 99, stdin);
        }
// Implementing string sort.....

 for (i = 0; i < SIZE-1; i++)
         {
                for (j = i+1; j < SIZE; j++)
                {
                        if (strcmp( names[i], names[j]) >0)
                        {
                            strcpy(temp, names[i]);
                            strcpy(names[i], names[j]);
                            strcpy(names[j], temp);
                        }
                }
        }
```

Note:

strcmp(name[i], key == 0) means, key and name[i] are the same
strcmp(name[i], name[j] > 0) means, sort A --> Z or alphabetize
strcmp(name[i], name[j] < 0) means, sort Z--> A or reverse-alphabetize