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

/
**********************************************************************
*******
*Function       : main
*Input parameters: none
*RETURNS        :       0 on success
**********************************************************************
*******/

int main(void)
{
        char acNames[20][30], cTemp[30], cKeyName[30];
        int iNum, i, j, iPos, iLow, iHigh, iMid, iFound;

        printf("\nEnter no of names\n");
        scanf("%d",&iNum);
        getchar();

        printf("\nEnter %d names\n", iNum);
        for(i=0;i<iNum;i++)
                gets(acNames[i]);

        for(i=0;i<iNum;i++)
        {
                for(j=i+1;j<iNum;j++)
                {
                        if(strcmp(acNames[i], acNames[j])>0)
                        {
                                strcpy(cTemp, acNames[i]);
                                strcpy(acNames[i], acNames[j]);
                                strcpy(acNames[j], cTemp);
                        }
                }
        }

        printf("\nThe names in sorted form \n");

        for(i=0;i<iNum;i++)
                printf("%s\n",acNames[i]);

        printf("\n");
        printf("\nEnter the name you want to search\n");
        gets(cKeyName);

        iFound = 0;
        iLow = 0;
        iHigh = iNum-1;

        while(iLow <= iHigh)
```

```c
        {
                iMid = (iLow + iHigh)/2;

                if(strcmp(cKeyName, acNames[iMid]) == 0)       /
*KEY ELEMENT FOUND*/
                {
                        iPos = iMid;
                        iFound = 1;
                        break;
                }
                else if(strcmp(cKeyName, acNames[iMid]) < 0)    /
*KEY ELEMENT IS IN 1ST HALF*/
                        iHigh = iMid - 1;
                else    /*KEY ELEMENT IS IN 2ND HALF*/
                        iLow = iMid +1;
        }


        if(iFound)
                printf("\nKey name %s found at position %d
\n",cKeyName,iPos+1);
        else
                printf("\nKey element not found\n");

        return 0;
}
```