

May 2 Lab questions

#1. WAP to capitalize first character of each word of a string entered through keyboard.

Code:

```
#include <stdio.h>
#include <string.h>
#include <ctype.h>
int main()
{
    int i_285,j_285,len_285;
    char A_285[30];
    printf("please give a short sentence\n");
    gets(A_285);
    len_285= strlen(A_285);
    for(i_285=0;A_285[i_285]!='\0';i_285++)
    {
        if(A_285[i_285]==' ')
        {
            A_285[i_285+1]=A_285[i_285+1]-32;
        }
        else if(i_285==0)
        {
            A_285[i_285]=A_285[i_285]-32;
        }
    }
    puts(A_285);
    return 0;
}
```

Output:

```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc capitalize.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
please give a short sentence
uagc lauhec ioayhc iauhe lkauhec
Uagc Lauhec Ioayhc Iauhe Lkauhec
PS C:\Users\KIIT\Desktop\Programming\28_april strings> |
```

#2.WAP to print a given string in an alphabetical order

Code:

```
#include <stdio.h>
#include <string.h>
int main()
{
    int i_285,j_285,temp_285,n_285;
    char A_285[30];
    printf("please give a string\n");
    gets(A_285);
    n_285= strlen(A_285);
    for(i_285=0;i_285<(n_285-1);i_285++)
```

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```
{
    for(j_285=(i_285+1);j_285<n_285;j_285++)
    {
        if(A_285[i_285]<A_285[j_285])
        {
            temp_285= A_285[j_285];
            A_285[j_285]=A_285[i_285];
            A_285[i_285]=temp_285;
        }
    }
}
for(i_285=0;A_285[i_285]!='\0';i_285++)
{
    printf("%c ",A_285[i_285]);
}
}
```

Output:

```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc alphabetical.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
please give a string
kajghcycajhec
y k j j h h g e c c c a a
PS C:\Users\KIIT\Desktop\Programming\28_april strings> █
```

#3. WAP to sort a list of names/strings alphabetically.

Code:

```
#include <stdio.h>
#include <string.h>
int main()
{
    int i_285,j_285,n_285;
    char A_285[100][30],temp_285[30];
    printf("Please provide the number of names\n");
    scanf("%d",&n_285);
    printf("please give your list of names\n");
    for(i_285=0;i_285<n_285;i_285++)
    {
        scanf("%s",A_285[i_285]);
    }

    for(i_285=0;i_285<n_285;i_285++)
    {
        for(j_285=(i_285+1);j_285<n_285;j_285++)
        {
            if(strcmp(A_285[i_285],A_285[j_285])>0)
            {
```

KIDUS ABEBE MEKONEN

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```
                strcpy(temp_285,A_285[j_285]);
                strcpy(A_285[j_285],A_285[i_285]);
                strcpy(A_285[i_285],temp_285);
            }

        }
    }
    printf("The sorted list is down below\n");
    printf("=====\n");
    for(i_285=0;i_285<n_285;i_285++)
    {
        printf("%s",A_285[i_285]);
        printf("\n");
    }
}
```

Output:

```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc 2D_bubblesort.c
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe
Please provide the number of names
5
please give your list of names
ray
thompson
darik
nahom
samri
The sorted list is down below
=====
darik
nahom
ray
samri
thompson
PS C:\Users\KIIT\Desktop\Programming\28_april strings> █
```

#4. WAP to extract the first character of each word of a given string (Achro-matic string).

Code:

```
#include <stdio.h>
int main()
{
    int i_285,len_285;
    char A_285[30],space_285,first_285;
    printf("provide a short sentence\n");
    gets(A_285);
    printf("%c",A_285[0]);
    for(i_285=0;A_285[i_285]!='\0';i_285++)
    {
        if(A_285[i_285]==' ')
        {
            i_285++;
            printf("%c",A_285[i_285]);
        }
    }
}
```

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```
    }  
}  
return 0;  
}
```

Output:

```
PS C:\Users\KIIT\Desktop\Programming\28_april strings> gcc achromatic_string.c  
PS C:\Users\KIIT\Desktop\Programming\28_april strings> ./a.exe  
provide a short sentence  
Finally, this is the last one  
Ftitlo  
PS C:\Users\KIIT\Desktop\Programming\28_april strings> █
```