Name: Antarin Ghosal

Ha 7.5

```c
/*
Name : Antarin ghosal
HA7.5 WAP to replace all occurrences of a substring in a given string with a new one.
*/

#include<stdio.h>
#include<string.h>
int main()
{
    char str[100],str1[100],str2[100];
    int k,ch,b,j;

    printf("ENTER THE STRING:");
    scanf("%[^\n]s",str);

    printf("ENTER THE SUBSTRING TO REPLACE:");
    scanf(" %[^\n]s",str1);

    printf("ENTER THE SUBSTRING TO REPLACE WITH:");
    scanf(" %[^\n]s",str2);

    int len=strlen(str),len1=strlen(str1),len2=strlen(str2),i=0;

    while(str[i]!='\0')
    {
        b=0;
        if(str[i]==str1[0])
            {
                k=0,ch=0,b=0;
                for(j=i;j<i+len1;j++)
                    if(str1[k++]==str[j])
                        ch++;
                if(ch==len1)
                    b=1;
            }
        if(b==1)
            {
                printf("%s",str2);
                i=i+(len1-1);
            }
        else
            printf("%c",str[i]);
            i=i+1;
    }
    return 0;
```

```
}
```

Ha 7.4

```c
/*
Name : Antarin ghosal
HA7.4 WAP to sort a list of names/strings alphabetically.
*/

#include<stdio.h>
#include<string.h>
int main()
{
    int i,j,n;
    char str[100][100],temp[100];


    printf("Enter number of names :\n");
    scanf("%d",&n);
    printf("Enter names in any order:\n");


    for(i=0;i<n;i++)
    {
        scanf("%s",str[i]);
    }

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

```
        }
    }

    printf("\nThe sorted order of names are:\n");
    for(i=0;i<n;i++)
    {
        printf("%s\n",str[i]);
    }
    return 0;
}
```

```
Enter number of names :
2
Enter names in any order:
anto
antarin

The sorted order of names are:
antarin
anto
```

```
Enter number of names :
3
Enter names in any order:
jayas
rajesh
antarin

The sorted order of names are:
antarin
jayas
rajesh
```

La 7.5

```
/*
Name : Antarin ghosal
LA7.5 WAP to reads a sentence and prints frequency of each of the vowels and total count
of Consonants.
*/

#include<stdio.h>
#include<string.h>
#include<ctype.h>
int main()
{
int i,vc=0,c=0;char ch;
char str[100];

    printf("Enter the sstring: ");
    scanf("%[^\n]s",str);
    int len=strlen(str);
    for(i=0;i<len;i++)
    {
        if(str[i]=='a'||str[i]=='e'||str[i]=='i'||str[i]=='o'||str[i]=='u'||str[i]=='A'||s
tr[i]=='E'||str[i]=='I'||str[i]=='O'||str[i]=='U')
```

```c
            vc++;
        else if(isalpha(str[i]))
            c+=1;
        else
            continue;
    }


    printf("NUMBER OF VOWEL: %d\n",vc);
    printf("NUMBER OF CONSUNENT: %d",c);


return 0;
}
```

```
Enter the sstring: hello
NUMBER OF VOWEL: 2
NUMBER OF CONSUNENT: 3
```

```
Enter the sstring: antarin
NUMBER OF VOWEL: 3
NUMBER OF CONSUNENT: 4
```

La 7.6

```c
/*
Name : Antarin ghosal
LA7.6 WAP to replace all occurrences of a character in a string with the previous 3rd
character if any of the character.
*/

#include<stdio.h>
#include<string.h>
int main()
{
char ch;
char str[10];
int i;
    printf("Enter the sstring: ");
    scanf("%[^\n]s",str);
    int len=strlen(str);
    printf("%s",str);


    for(i=0;i<len;i++)
    {
        ch=tolower(str[i])-3;

        if(ch<97)
            ch=ch+26;

        if(isalpha(str[i]))
```

```
            str[i]=ch;
    }

    printf("\n%s",str);



return 0;
}

//reverse is on the string
```

```
Enter the sstring: antarin     Enter the sstring: hello
antarin                        hello
xkqxofk                        ebiil
```

La 7.7

```
/*
Name : Antarin ghosal
LA7.7 Develop a user defined function and test them in the main program for the following
standard function:
int MatchAny(char s1[], char s2[]) :It takes two string arguments and it returns  1 if s2
is substring of s1, returns 0 if both s1 and s2 are equal strings,
 otherwise, returns -1. Do not use the standard library functions.

*/


#include<stdio.h>
#include<string.h>
int main()
{
    char str[100],str1[100],str2[100];
    int k,ch,b=0,j;

    printf("ENTER THE STRING(s1):");
    scanf("%[^\n]s",str);

    printf("ENTER THE SUBSTRING:(s2):");
    scanf(" %[^\n]s",str1);

    int len=strlen(str),len1=strlen(str1),i=0;

    if(len!=len1)
    {
        while(str[i]!='\0')
```

```c
        {
        b=0;
        if(str[i]==str1[0])
                {
                    k=0,ch=0,b=0;
                    for(j=i;j<i+len1;j++)
                        if(str1[k++]==str[j])
                            ch++;
                    if(ch==len1)
                        b=1;
                }
            i=i+1;
        }
    if(b==1)
        printf("1");
    else
        printf("-1");
    }


    else if(len==len1)
    {
        for(i=0;i<len;i++)
            if(str[i]!=str1[i])
                b=1;
        if(b=1)
            printf("0");
        else
            printf("-1");
    }
    else
        printf("-1");

    return 0;
}
```

```
ENTER THE STRING(s1):antarin
ENTER THE SUBSTRING:(s2):ghosal
-1
```

```
ENTER THE STRING(s1):hell
ENTER THE SUBSTRING:(s2):hello
-1
```

Sa 7.5

```
/*
Name : Antarin ghosal
SA7.5 WAP to extract the first character of each word of a given string  (Achromatic
string).
```

```c
*/

#include<stdio.h>
#include<string.h>
int main()
{
    char ch;
    char str[10];
    int i;

    printf("Enter the string: ");
    scanf("%[^\n]s",str);
    int len=strlen(str);

    printf("%c ",str[0]);

    for(i=1;i<len;i++)
        if(str[i]==' ')
            printf("%c ",str[i+1]);




return 0;
}
```

```
Enter the string: antarin
a
```

```
Enter the string: Hello
H
```

Sa 7.6

```c
/*
Name : Antarin ghosal
SA7.6 WAP to extract a substring of a given string.
*/

#include<stdio.h>
#include<string.h>
int main()
{
    char ch;
    char str[10];
    int i,p1,s;

    printf("Enter the string: ");
    scanf("%[^\n]s",str);
```

```c
    int len=strlen(str);

    printf("enter the staring postion: ");
    scanf("%d",&p1);
    printf("enter the size of the substring:");
    scanf("%d",&s);

    printf("subString: ");
    for(i=p1-1;i<(p1+s)-1;i++)
        printf("%c",str[i]);




    return 0;
}
```

```
Enter the string: Hello world
enter the staring postion: 2
enter the size of the substring:4
subString: ello
```

```
Enter the string: antarin ghosal
enter the staring postion: 2
enter the size of the substring:
subString: ntar
```

Sa 7.8

```c
/*
Name : Antarin ghosal
SA7.8 WAP to replace all occurrences of a character in a given string with a new
character.
*/

#include<stdio.h>
#include<string.h>
int main()
{
    char ch,ch2;
    char str[10];
    int i,p1,s;

    printf("Enter the string: ");
    scanf("%[^\n]s",str);
    int len=strlen(str);

    printf("CHAR TO REPLACE:");
    scanf(" %c",&ch);
    printf("REPLACE WITH: ");
```

```c
    scanf(" %c",&ch2);

    printf("NEW STRING:  ");
    for(i=0;i<len;i++)
        if(str[i]==ch)
            str[i]=ch2;

    printf("%s",str);



return 0;
}
```

```
Enter the string: antarin
CHAR TO REPLACE:a
REPLACE WITH: d
NEW STRING:  dntdrin
```

```
Enter the string: hello
CHAR TO REPLACE:l
REPLACE WITH: a
NEW STRING:  heaao
```