Day : Strings (7-8-2025)

1. Write a program to find the length of a string without using strlen().

IPO

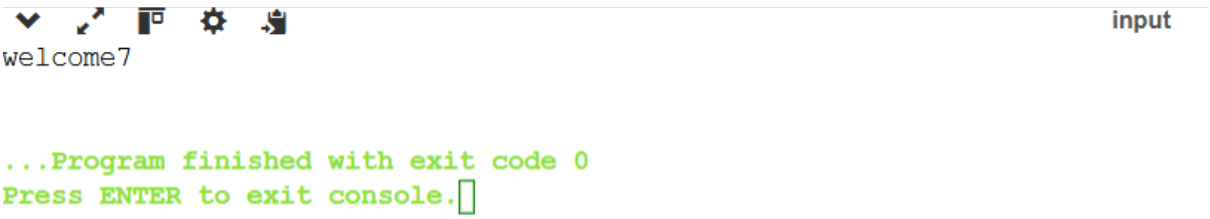
Input : get a value as input

Process: to find the length of a string by the if condition

Str[i]!=:'\0' to print the length of the input

Output: output the length of input

```
#include<stdio.h>
void main()
{
   char str1[10]="welcome";
   int i,count=0;
   printf("%s",str1);
   for(i=0;i<10;i++)
   {
      if(str1[i]!='\0')
      count++;
   }
   printf("%d\n",count);
}
```



2. Write a program to copy one string to another.

IPO

Input : get a value as input

Process: to program the given input to copy one string to another by copying str1 to str2.

Output: output the str2 same like str 1

```
#include<stdio.h>
void main()
{
   char str1[10]="welcome";
   char str2[10];
   int i;
   for(i=0;i<10;i++)
   {
      str2[i]=str1[i];
   }
   printf("%s",str2);
}
```

```
welcome

...Program finished with exit code 0
Press ENTER to exit console.
```

3. Write a program to concatenate two strings.

IPO

Input : get two value as input

Process: to program the concatenate two strings , like for eg

If str1 is welcome then str2 is home means in str3 it has to print in the format welcome home

Output: output the concatenate two strings

```
#include<stdio.h>
void main()
{
   char str1[10]="welcome";
   char str2[6]="homes";
   char str3[11];
   int i;
   for(i=0;i<10;i++)
   {
      str3[i]=str1[i];
   }
   printf("%s",str1);
   {
   str3[i]=str2[i];
   }
      printf("%s",str2);
}
```

4. Write a program to compare two strings.

IPO

Input : get two values as input

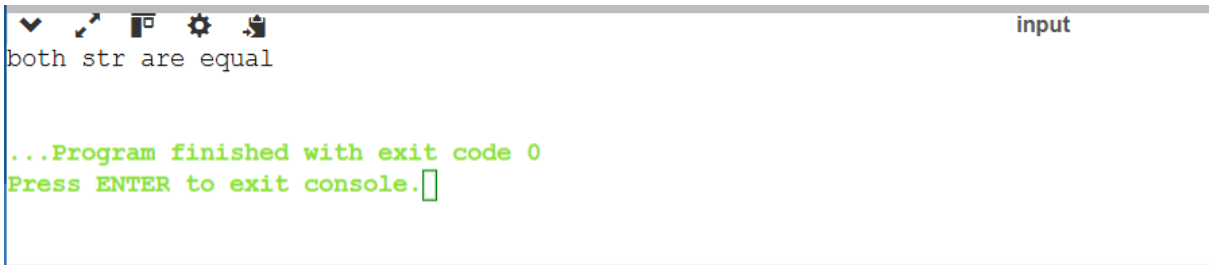
Process: to program to compare two strings

Output: output the greatest

```
void main()
{
   int count1=0,count2=0,flag=0,i;
   char str1[30],str2[30];
   while (str1[count1]!='\0')
   count1++;
   while (str2[count2]!='\0')
   count2++;

    i=0;
   while(str1[i]==str2[i]&&str1[i]!='\0')
   {
      i++;
   }
   if (str1[i]>str2[i])
      printf("str1 is greater than str2\n");
```

```
   else if(str1[i]<str2[i])
      printf("str2 is greater than str1\n");
   else
    printf("both str are equal\n");
}
```



5. Write a program to count vowels and consonants in a string.

IPO

Input : to get values as input

Process: to program to count the vowels and consonants in a string

Output: output the vowels and consonants in a sting

```
#include<stdio.h>
void main()
{
   char str1[15]="welcome To SEE";
   int i,count=0,vcount=0;
   printf("%s",str1);
   for(i=0;i<15;i++)
   {
      if((str1[i]=='a')||(str1[i]=='e')||(str1[i]=='i')||(str1[i]=='o')||(str1[i]=='u'))
      vcount++;
```

```
    else
    {
     count++;
    }
   }
  printf(" vcount= %d\n count= %d\n",vcount,count);
}
```

```
welcome To SEE vcount= 4
 count= 11


...Program finished with exit code 0
Press ENTER to exit console.
```

6. Write a program to convert lowercase to uppercase and vice versa

7. Write a program to check if a string is palindrome.

IPO

Input : get a value a value as input

Process: to program string is palindrome by considering flag==0

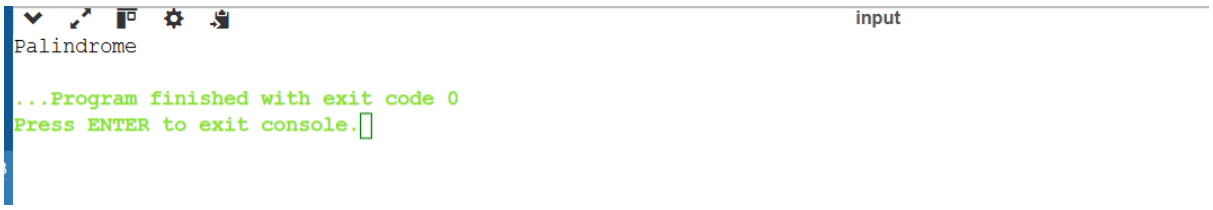
Str1[i]=str[i];

Output: output the program to string is palindrome

```
#include<string.h>
void main()
{
   char a[5] = "level";
   char b[10];
   int i,len,flag = 0;
   len = strlen(a);
```

```
    for (i = 0; i < len; i++)
    {
        b[i] = a[len - 1 - i];
    }
    b[len] = '\0'; // Null-terminate the reversed string
    for (i = 0; i < len; i++)
    {
        if (a[i] != b[i])
        {
            flag = 1;
            break;
        }
    }

    if (flag == 0)
        printf("Palindrome");
    else
        printf("Not apalindrome");
}
```



8. Write a program to reverse a string.

IPO

Input : get a value as input

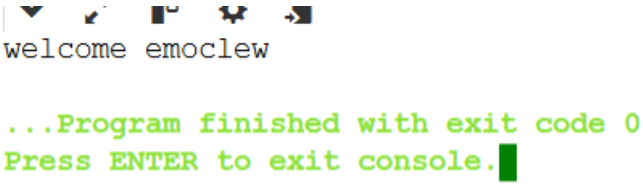
Process: to program to reverse a string by

Str3[i]=str[l]

Output: output the value as reverse a string of given input

```
#include<stdio.h>
void main()
{
   char str1[10]="welcome";
   char str2[10];
   char str3[10];
   int i;
   for(i=0;i<10;i++)
   {
      str2[i]=str1[i];
   }
   printf("%s",str1);
   int l=6;
   for(i=0;i<7;i++)
   {
      str3[i]=str1[l];
      l--;
   }

   printf(" %s",str3);
}
```



9. Write a program to count words in a string.

IPO

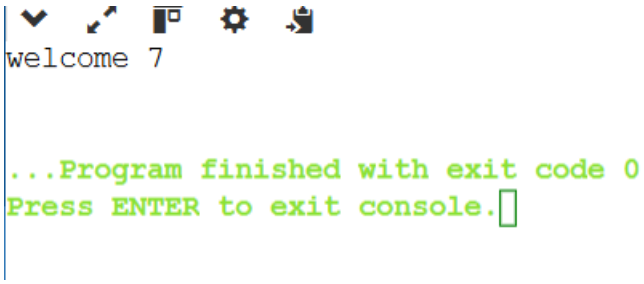
Input : get a value as input

Process: to program the count words in a string

By the condition Str1[i]=' '

Output: output the words count in input

```
#include<stdio.h>
void main()
{
   char str1[10]="welcome";
   int i,count=0;
   printf("%s",str1);
   for(i=0;i<10;i++)
   {
      if(str1[i]!='\0')
      count++;
   }
   printf("%d\n",count);
}
```



10. Write a program to find the frequency of each character in a string.

IPO

Input : get a value as input

Process: to program to find the frequency of each charcter in given input like 1,2,3,2 as 2 occurs 2 times and others frequency 1

Output : output the frequency of each character in a string

```
#include<stdio.h>
void main()
{
   int a[5]={1,2,1,2,3};
   int b[5];
   b[0]=a[0];
   int flag=0,i,j,k=0;
   for (i=0;i<5;i++)
   {
      flag =0;
      for (j=0;j<5;j++)
      {
         if(a[i]==b[j])
```

```
        {
        flag=1;break;
        }
     }
    if (flag==0)
    {
        b[k]=a[i];
        k++;
    }
    }
int count=0;
for (i=0;i<k;i++)
 {
    count=0;
    for(j=0;j<5;j++)
    {
        if(b[i]==a[j])
        count++;
    }
    printf("%d-%d\n",b[i],count);
 }
}
```

```
2-2
1-2
3-1


...Program finished with exit code 0
Press ENTER to exit console.
```

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