PROGRAMMING LABORATORY-6

CS1000

Assignment-6

Group-'P7' Section:'E'

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Assignment-6

1) WAP to enter the details of a student (Name, Roll_number, and Branch) as input through keyboard and print it.

//WAP to enter the details of a student (Name, Roll_number, and Branch) as input through keyboard and print it.

```c
#include<stdio.h>
int main()
{
        char name[20];                          //variable declaration
        char roll_no[10];
        char branch[20];

        printf("Enter your name please:");
        scanf("%s",&name);
        printf("\n Enter your Roll number:");
        scanf("%s",&roll_no);
        printf("\n Enter you branch:");
        scanf("%s",&branch);

        printf("\n Your name is %s",name);
        printf("\n your roll number is %s",roll_no);
        printf("\n your branch is %s",branch);

  return 0;
}
```

```
//WAP to enter the details of a student (Name, Roll_number, and Branch) as input through keyboard and print it.

#include<stdio.h>
int main()
{
    char name[20];
    char roll_no[10];
    char branch[20];

    printf("Enter your name please:");
    scanf("%s",&name);
    printf("\n Enter your Roll number:");
    scanf("%s",&roll_no);
    printf("\n Enter you branch:");
    scanf("%s",&branch);

    printf("\n Your name is %s",name);
    printf("\n your roll number is %s",roll_no);
    printf("\n your branch is %s",branch);

    return 0;
}
```

```
Enter your name please:Prachi_Nandi

Enter your Roll number:120CS0196

Enter you branch:computer_Science

Your name is Prachi_Nandi
your roll number is 120CS0196
your branch is computer_Science
--------------------------------
Process exited after 32.95 seconds with return value 0
Press any key to continue . . .
```

2) WAP to check if a string is palindrome or not

```c
#include<stdio.h>

int main()

{

char word[20];     //variable declaration

 int i,len,j=0;


   printf("Enter  the string : ");

   gets(word);

   len=strlen(word);


   for(i=0;i<len/2;i++)          //logic

   {

       if(word[i]==word[len-i-1])
```

```
        j++;
      }
    if(j==i)
        printf("string is palindrome:)");
     else
        printf("string is not palindrome:(");


return 0;
}
```
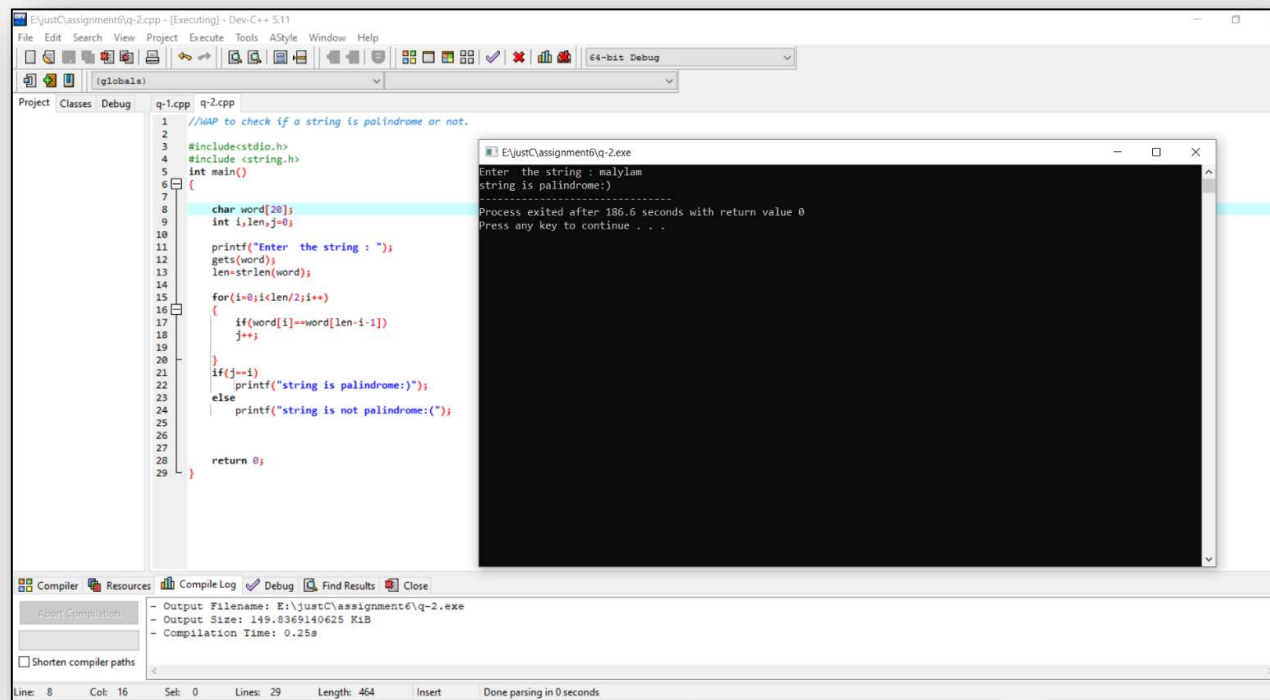
3) WAP to count number of vowels and consonants in a string

```c
#include <stdio.h>
#include <string.h>
int main()
{
 char word[20];

    int i,vowels=0,consonants=0;

    printf("Enter  the string :) ");
    gets(word);

    for(i=0;word[i];i++)

    {
        if((word[i]>=65 && word[i]<=90)|| (word[i]>=97 && word[i]<=122))

      {

    if(word[i]=='a'|| word[i]=='e'||word[i]=='i'||word[i]=='o'||word[i]=='u'||word[i]=='A'||word[i]=='E'||word[i]=='I'||word[i]=='O' ||word[i]=='U')
            vowels++;

    else
            consonants++;
      }
        }

    printf("number of vowels %d\n",vowels);
    printf("number of consonants %d\n",consonants);
     return 0;
}
```
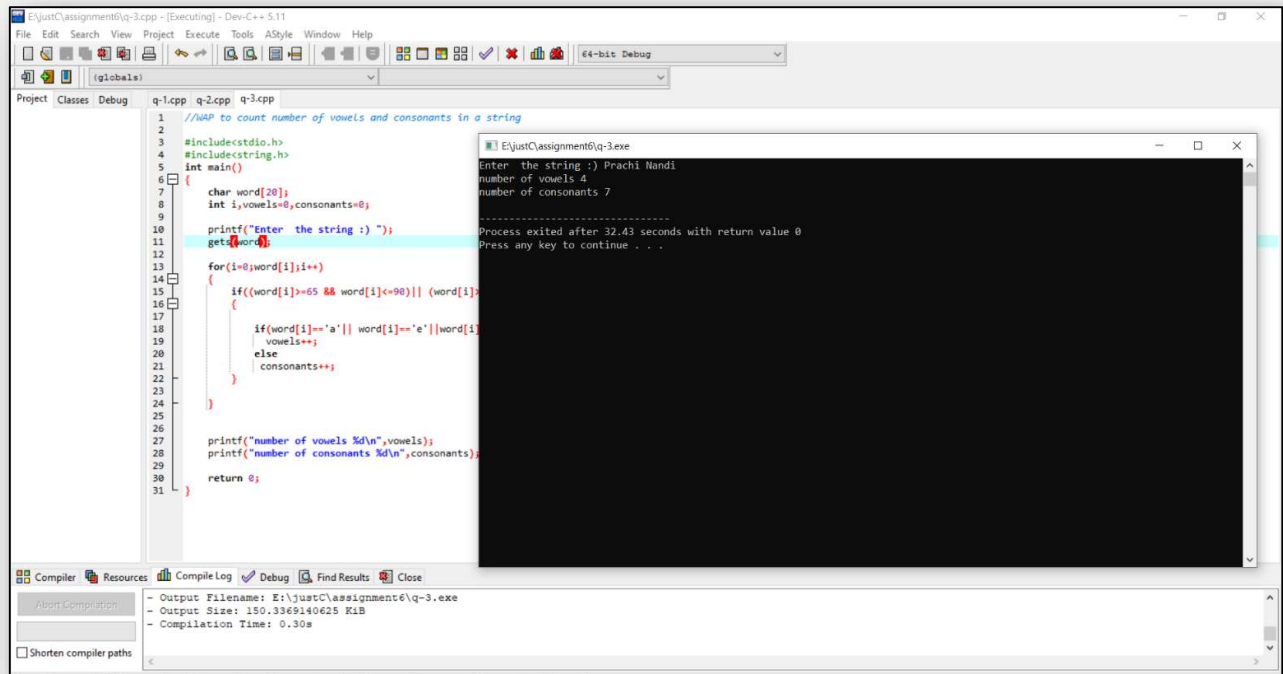
4) WAP to replace a string by another string. Example: In the sentence "All is well.", replace "well" with "WELL".

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


void new_string(char [],char[],char[]);        //function declaration


int main()
{
char string[10],replace[10],new_str[10];
printf("\nEnter a string: ");
gets(string);
printf("\nEnter the word that you want to replace: ");
gets(replace);
```

```c
printf("\nEnter the new word: ");
gets(new_str);
new_string(string,replace,new_str);                    //function call
printf("\nThe string after replacing that word: %s\n",string);
}
void new_string(char string[],char replace[],char new_str[])      //function
{
int stringLen,replaceLen,newLen;
int i=0,j,k;
int flag=0,start,end;
stringLen=strlen(string);
replaceLen=strlen(replace);
newLen=strlen(new_str);

for(i=0;i<stringLen;i++)
{
flag=0;
start=i;
for(j=0;string[i]==replace[j];j++,i++)
if(j==subLen-1)
flag=1;
end=i;
if(flag==0)
i-=j;
else
{
for(j=start;j<end;j++)
{
for(k=start;k<stringLen;k++)
string[k]=string[k+1];
stringLen--;
i--;
}
```

```c
for(j=start;j<start+newLen;j++)

{

for(k=stringLen;k>=j;k--)

string[k+1]=string[k];

string[j]=new_str[j-start];

stringLen++;

i++;

}

}

}

}

return 0;

}
```

5) WWAP which print initial of any name.

   Example Input: Sachin Ramesh Tendulkar

   Output: SRT

```c
#include <stdio.h>
int main()
{
    char name[20];                    //variable declaration
    int i=0;
    printf("Enter a string: ");
    gets(name);
    printf("%c",*name);
    while(name[i]!='\0')
    {
        if(name[i]==' ')
            {
            i++;
            printf("%c",*(name+i));
        }
        i++;
    }
  return 0;
}
```
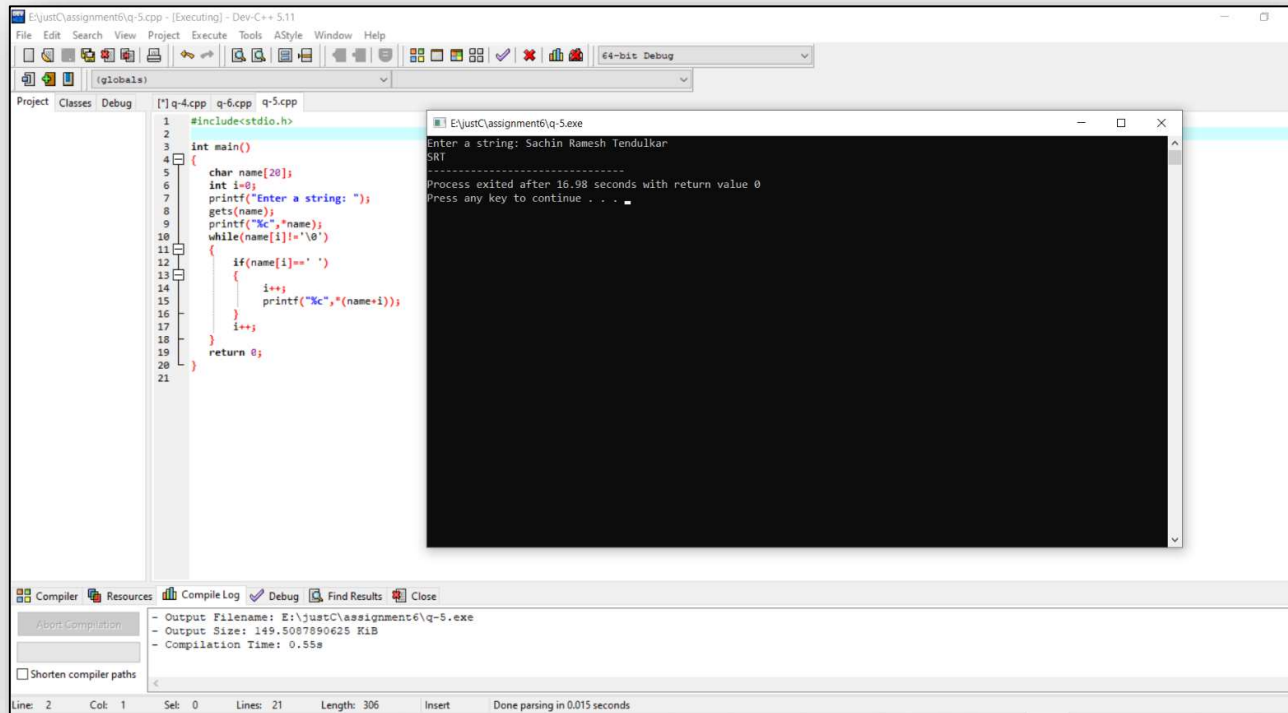
6) WAP to enter two strings and compare whether they are equal or not.

```c
#include<stdio.h>
#include<string.h>
int main()
{
char string1[20],string2[20];
    int i,j=0;
    printf("Enter the string1: ");
    gets(string1);
    printf("Enter the string2: ");
    gets(string2);
    if(strlen(string1)==strlen(string2))
    {
        for(i=0;string2[i]!='\0';i++)
        {
```

```
            if(string1[i]==string2[i])

            j++;

              }

            if(j==i)

        printf("strings are equal");

     else

        printf("strings are unequal");

   }

   else

    printf("strings are unequal");

return 0;

}
```

Codes are uploaded on my GitHub account :
https://github.com/prachi237/justC

Submitted by: Prachi Nandi 120CS0196

THANK YOU