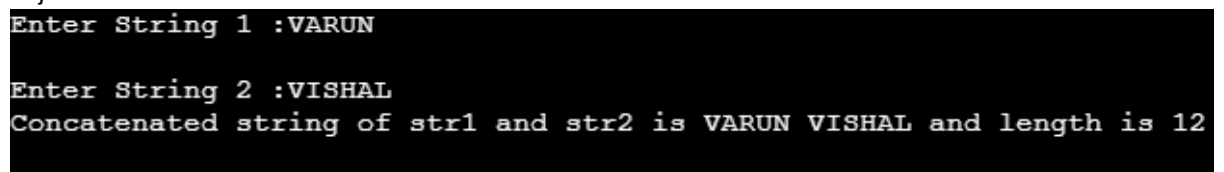


1. Implement a C program to concatenate two strings and find the length of resultant string without using built in functions.

```
#include<stdio.h>
#include<string.h>
int main()
{
    char str1[50], str2[30],str3[100];
    int i=0, j=0;
    printf("\nEnter String 1:");
    gets(str1);
    printf("\nEnter String 2:");
    gets(str2);

    while (str1[i]!='\0')
    {
        str3[i]=str1[i];
        i++;
    }
    while (str2[j]!='\0')
    {
        str3[i]=str2[j];
        i++;
        j++;
    }
    str3[i]='\0';

    printf("Concatenated string of str1 and str2 is %s and length is %d\n",str3,i);
    return 0;
}
```

A screenshot of a terminal window showing the execution of the C program. The first prompt is "Enter String 1 :VARUN", followed by "Enter String 2 :VISHAL". The final output line is "Concatenated string of str1 and str2 is VARUN VISHAL and length is 12".

```
Enter String 1 :VARUN
Enter String 2 :VISHAL
Concatenated string of str1 and str2 is VARUN VISHAL and length is 12
```

2. Develop a C program to read and print three book details (i.e. Book Title, Author, Price, number of pages, date of publication). Also print the Book details with the highest price.

```
#include<stdio.h>
#include<string.h>
#define SIZE 20

struct bookdetail
{
    char name[20];
    char author[20];
    char publication[20];
    int pages;
    float price;
};

void output(struct bookdetail v[],int n);
```

```

void main()
{
    struct bookdetail b[SIZE];

    int num,i;
    printf("Enter the Numbers of Books:");
    scanf("%d",&num);
    printf("\n");
    for(i=0;i<num;i++)

    {

        printf("\t=:Book  %d Detail:=\n",i+1);

        printf("\nEnter  the Book Name:\n");
        scanf("%s",b[i].name);

        printf("Enter  the Author of Book:\n");
        scanf("%s",b[i].author);

        printf("Enter  the date of publication:\n");
        scanf("%s",b[i].publication);

        printf("Enter  the Pages of Book:\n");
        scanf("%d",&b[i].pages);

        printf("Enter  the Price of Book:\n");
        scanf("%f",&b[i].price);

    }

    output(b,num);
}

void output(struct bookdetail v[],int n)
{
    int i,t=1;

    for(i=0;i<n;i++,t++)
    {

        printf("\n");

        printf("Book  No.%d\n",t);

        printf("\t\tBook  %d Name is=%s \n",t,v[i].name);

        printf("\t\tBook  %d Author is=%s \n",t,v[i].author);

        printf("\t\tBook  %d Date of publication is=%s \n",t,v[i].publication);

        printf("\t\tBook  %d Pages is=%d \n",t,v[i].pages);

        printf("\t\tBook  %d Price is=%f \n",t,v[i].price);
    }
}

```

```
printf("\n");
```

```
}
```

```
}
```

```
Enter the Numbers of Books:3
```

```
=:Book 1 Detail:=
```

```
Enter the Book Name:
```

```
Test1
```

```
Enter the Author of Book:
```

```
A
```

```
Enter the date of publication:
```

```
19/01/1901
```

```
Enter the Pages of Book:
```

```
36
```

```
Enter the Price of Book:
```

```
12
```

```
=:Book 2 Detail:=
```

```
Enter the Book Name:
```

```
Test2
```

```
Enter the Author of Book:
```

```
B
```

```
Enter the date of publication:
```

```
20/01/2001
```

```
Enter the Pages of Book:
```

```
42
```

```
Enter the Price of Book:
```

```
20
```

```
=:Book 3 Detail:=
```

```
Enter the Book Name:
```

```
Test3
```

```
Enter the Author of Book:
```

```
C
```

```
Enter the date of publication:
```

```
25/01/1974
```

Enter the Pages of Book:

56

Enter the Price of Book:

96

Book No.1

Book 1 Name is=Test1

Book 1 Author is=A

Book 1 Date of publication is=19/01/1901

Book 1 Pages is=36

Book 1 Price is=12.000000

Book No.2

Book 2 Name is=Test2

Book 2 Author is=B

Book 2 Date of publication is=20/01/2001

Book 2 Pages is=42

Book 2 Price is=20.000000

Book No.3

Book 3 Name is=Test3

Book 3 Author is=C

Book 3 Date of publication is=25/01/1974

Book 3 Pages is=56

Book 3 Price is=96.000000