

Aim:

Write a **C** program to print the **pattern** using a character array.

Sample Input and Output:

```
Enter the string : SASI
S
SA
SAS
SASI
```

Source Code:

stringPattern.c

```
#include<stdio.h>
#include<string.h>
void main ()
{
    char str[20], i=0, j,len;
    printf ("Enter the string : ");
    scanf("%s",str);
    len=strlen(str);
    while(i<len)
    {
        for (j=0;j<=i;j++)
        {
            printf("%c",str[j]);
        }
        printf("\n");
        i++;
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter the string : SASI
S
SA
SAS
SASI

Test Case - 2
User Output
Enter the string : CodeTantra
C

Co
Cod
Code
CodeT
CodeTa
CodeTan
CodeTant
CodeTantr
CodeTantra

Test Case - 3
User Output
Enter the string : SARASWATHI
S
SA
SAR
SARA
SARAS
SARASW
SARASWA
SARASWAT
SARASWATH
SARASWATHI

Test Case - 4
User Output
Enter the string : RoboticTool
R
Ro
Rob
Robo
Robot
Roboti
Robotic
RoboticT
RoboticTo
RoboticToo
RoboticTool