

IT 161_LAB6

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Date: 10/2/2022

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Experiment 1(a)

Objective: Create C program to print stars sequence
(Right angular)

Software: Online compiler and debugger for C.

Code:

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

```
int main()
```

```
{
```

```
    int i, nstar, nrow;
```

```
    printf("Enter number of rows of stars:: ");
```

```
    scanf("%d", &nrow);
```

```
    for(i=1; i<=nrow; i++)
```

```
    {
```

```
        for(nstar=1; nstar<=i; nstar++)
```

```
        {
```

```
            printf("*");
```

```
        }
```

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

```
    }
```

```
    return 0;
```

```
}
```

```
main.c
1  /*Name: Dipean Dasgupta Roll: 202151188
2  Lab 6 Experiment 1(a)
3  This c program displays code to print stars sequence in right angular triangle form*/
4  #include <stdio.h>
5
6  int main()
7  {
8      int i, nstar, nrow;
9
10     printf("Enter value of n: ");
11     scanf("%d", &nrow);
12
13     for(i=1; i<=nrow; i++)
14     {
15         for(nstar=1; nstar<=i; nstar++)
16         {
17             printf("*");
18         }
19         printf("\n");
20     }
21     return 0;
22 }
23
24
```

Result:

Sample:

Enter number of rows of stars:7

```
*
**
***
****
*****
*****
*****
```

```
input
Enter number of rows of stars: 7
*
**
***
****
*****
*****
*****

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

Experiment 1(b)

Objective: Create C program to print stars sequence
(Isosceles triangle format)

Software: Online compiler and debugger for C.

Code:

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

```
int main(){
```

```
    printf("To print isosceles triangle\n");
```

```
    int a=7, nr, ns,k ;
```

```
    for(nr=0 ; nr<a ;nr++){
```

```
        for(ns=a ;ns>nr ;ns--){
```

```
            printf(" ");
```

```
        }
```

```
        for(k=0;k<=2*nr;k++){
```

```
            printf("*");
```

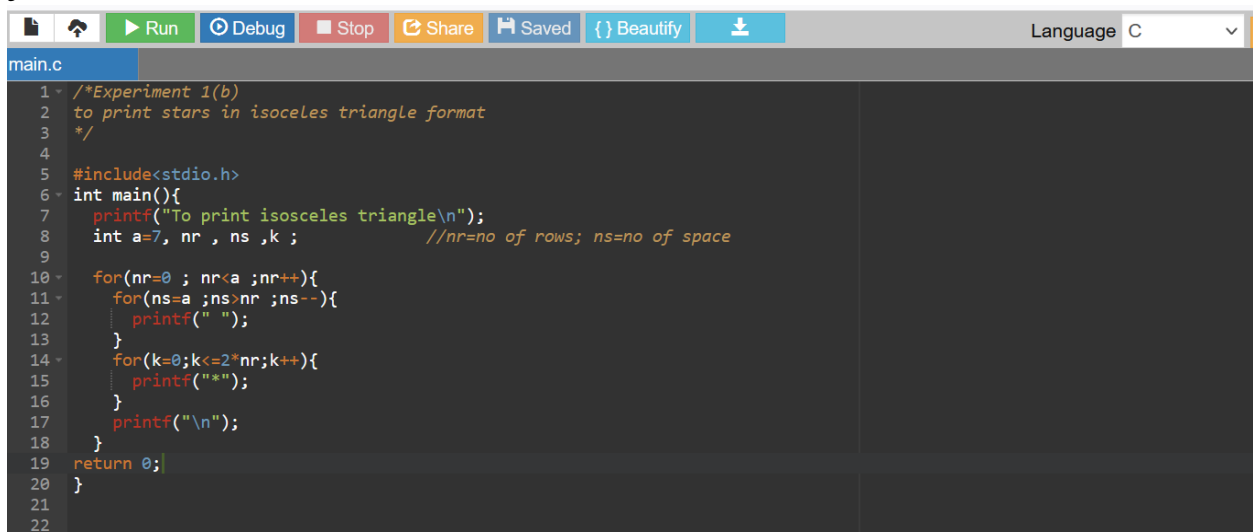
```
        }
```

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

```
    }
```

```
return 0;
```

```
}
```



```
1  /*Experiment 1(b)
2  to print stars in isosceles triangle format
3  */
4
5  #include<stdio.h>
6  int main(){
7      printf("To print isosceles triangle\n");
8      int a=7, nr , ns ,k ;          //nr=no of rows; ns=no of space
9
10     for(nr=0 ; nr<a ;nr++){
11         for(ns=a ;ns>nr ;ns--){
12             printf(" ");
13         }
14         for(k=0;k<=2*nr;k++){
15             printf("*");
16         }
17         printf("\n");
18     }
19     return 0;
20 }
21
22
```

Result:

```
      *
    ***
  *****
 *****
*****
*****
```



The screenshot shows a terminal window with a title bar containing icons for window management and the word "input". The terminal content is as follows:

```
To print isosceles triangle
      *
    ***
  *****
 *****
*****
*****
*****
*****

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

Experiment 2

Objective:- Program to print Fibonacci series up to 100

Software:- Online GDB is an online compiler and debugger tool for C/C++ languages.

Code:-

```
#include <stdio.h>

int main(){

    int a = 0 , b = 1 , nt=0 ;

    printf("%d\n%d\n",a,b);

    nt=a+b;

    while(nt<=100){

        printf("%d\n",nt);

        a=b;

        b=nt;

        nt=a+b;

    }

    return 0;

}
```

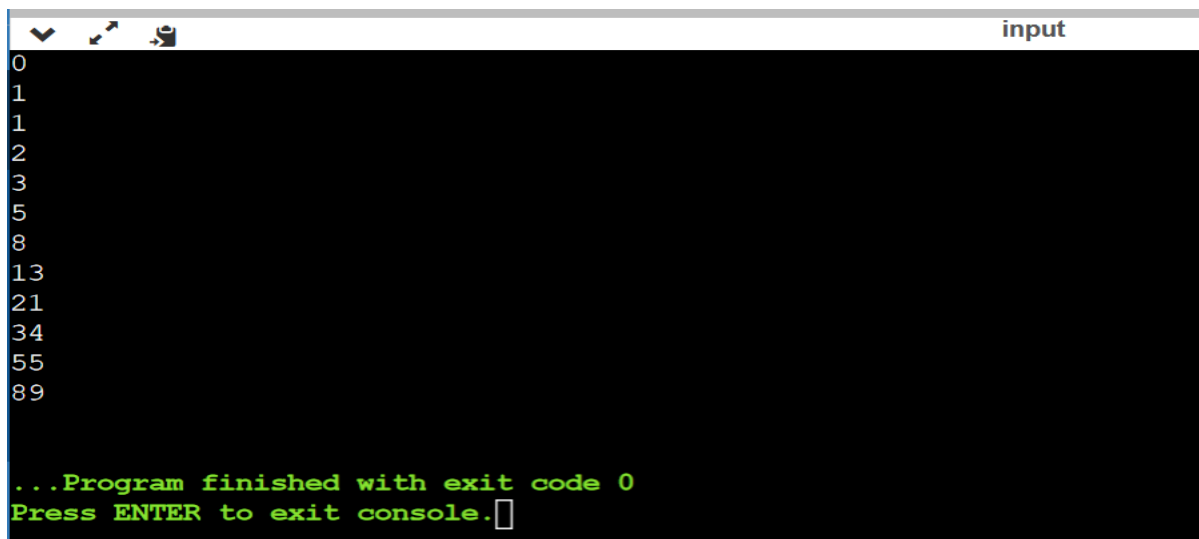
A screenshot of an online C compiler interface. The top bar contains buttons for 'Run', 'Debug', 'Stop', 'Share', 'Save', 'Beautify', and a download icon. The 'Language' dropdown is set to 'C'. The code editor shows the following C program:

```
1  /*Experiment 2
2  program to print fibonacci series upto 100*/
3
4
5  #include <stdio.h>
6  int main()
7  {
8      int a = 0 , b = 1 , nt=0;
9      printf("%d\n%d\n",a,b);
10     nt=a+b;
11     while(nt<=100){
12         printf("%d\n",nt);
13         a=b;
14         b=nt;
15         nt=a+b;
16     }
17     return 0;
18 }
19
20
```

Result:

To print fibonacci series upto 100

0
1
1
1
2
3
5
8
13
21
34
55
89

A screenshot of a console window titled "input". The window has a dark background with white text. It displays the Fibonacci series: 0, 1, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89. At the bottom, it shows the message "...Program finished with exit code 0" and "Press ENTER to exit console." followed by a cursor icon.

```
input
0
1
1
1
2
3
5
8
13
21
34
55
89

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

