

# ASSIGNMENT-1

By

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2023A1R028

1<sup>st</sup> Semester

CSE



**Model Institute of Engineering & Technology (Autonomous)**

(Permanently Affiliated to the University of Jammu, Accredited by NAAC with “A” Grade)

Jammu, India

2023

**Question 1** - Write a C program to print Fibonacci series up to a given number of terms.

CODE :-

```

1  //fibonacci sequence
2  #include<stdio.h>
3  int main()
4  {
5      int num1=0,num2=1,i,n;//n is for no. of iterations
6      printf("Enter the number of iterations \n");
7      scanf("%d",&n);
8
9
10     for(i=0;i<=n;i++)
11     {
12
13         printf(" %d\n",num1);
14         int sum=num1+num2;//sum of 0 + 1
15         num1=num2;//assigning num2 value(1) to num1 value(1)
16         num2=sum;//and sum value (0+1) to num2
17
18     }
19
20     return 0;
21
22 }
23

```

OUTPUT :-

```

PS C:\Users\hp\Desktop\UJVAL SINGH> cd "c:\Users\hp\Downloads"
PS C:\Users\hp\Downloads> cd "c:\Users\hp\Downloads\" ; if ($?) { gcc fibonacci_sequence_forloop.c -o fibonacci_sequence_forloop } ;
if ($?) { .\fibonacci_sequence_forloop }
Enter the number of iterations
5
0
1
1
2
3
5
PS C:\Users\hp\Downloads>

```

**Question 2** -Write the program for second largest element in array.

CODE :-

```

1  #include<stdio.h>
2  void main()
3  {
4      int n;
5      printf("Enter the limit\n");//3
6      scanf("%d",&n);
7      int a[n],i;
8      printf("Enter array elements\n");
9      for(i=0;i<n;i++)
10     scanf("%d",&a[i]);//a[0]=12,a[1]=13,a[2]=14
11     int big,sbig;
12     big=a[0];sbig=a[1];//let big =12 and sbig =13
13     for(i=1;i<n;i++)//2<3 here n = 3 1<3
14     {
15         if(big<a[i])//12<13 true
16         {
17             sbig=big;//sbig=12
18             big=a[i];//big=14
19         }
20         else if(sbig<a[i])
21             sbig=a[i];
22     }
23     printf("Second largest element is %d\n",sbig);//12 is the second largest number
24
25 }

```

OUTPUT :-

```

PS C:\Users\hp\Desktop\UJVAL SINGH> cd "c:\Users\hp\Downloads"
PS C:\Users\hp\Downloads> cd "c:\Users\hp\Downloads\" ; if ($?) { gcc 2nd_biggest_element.c -o 2nd_biggest_element } ; if ($?) { .\2nd_biggest_element }
Enter the limit
5
Enter array elements
1
2
3
4
5
Second largest element is 4
PS C:\Users\hp\Downloads>

```