

## Task1:-wap in c generate Fibonacci series up to given number

### First way-----

*//using while loop*

```
#include"stdio.h"

main(){
    int t1,t2,t3,n;
    t1=0,t2=1;
    printf("Enter your number for fibonacci: ");
    scanf("%d",&n);
    printf("fibonacci series is: %d %d ",t1 ,t2);
    t3=t1+t2;
    while(t3<=n){
        printf("%d ",t3);
        t1=t2;
        t2=t3;
        t3=t1+t2;
    }
}
```

---

### Second way-----

*//using for loop*

```
#include"stdio.h"

main(){
    int t1=0,t2=1,t3,i,n;
```

```

printf("Enter your number of terms for fibonacci series: ");
scanf("%d",&n);
printf("Fibonacci series is:%d %d ",t1,t2);
t3=t1+t2;
for(i=3;i<=n;++i){
    printf("%d ",t3);
    t1=t2;
    t2=t3;
    t3=t1+t2;
}
}

```

---

***Task 2:- wap in c to reverse the digit of a given number.***

```

#include<stdio.h>
main(){
    int n,reverse=0;
    printf("Enter your number you want to reverse order:");
    scanf("%d",&n);
    while(n!=0){ //n>0
        //    rem=n%10;
        reverse=reverse*10+n%10;
        n/=10;
    }
}

```

```
    }  
    printf("Reversed number is :%d ",reverse);  
}
```

---

***Task 3:- wap in c to make a table of given number.***

```
#include<stdio.h>  
main(){  
    int num,i;  
    printf("Enter your number you want to find table :");  
    scanf("%d",&num);  
    for(i=1;i<=10;i++){  
        printf("\n %d*%d: %d ",num,i,(num*i));  
    }  
}
```

---

***Task 4:- wap in c to find the factorial of given number.***

**First way-using integer datatype**

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

```
main(){
    int fact=1,n;
    printf("Enter your number you want to find fact:");
    scanf("%d",&n);
    if(n<0){
        printf("Entered number is invalid");
        //    return 0;
    }
    for(int i=n;i>=1;i--){
        fact=fact*i;
    }
    printf("factorial is:%d",fact);
}
```

---

### **Second way- using double datatype**

---

```
#include"stdio.h"
main(){
    int n;
    printf("Entered your number you want to factorial:");
    scanf("%d",&n);
```

```
if(n<0){
    printf("entered your number is invalid");
}
double fact=1;
for(double i=n;i>=1;i--){
    fact=fact*i;
}
printf("Factorial is:%lf",fact);
}
```

---

***Task 5:- wap in c to sum of digits of a given number.***

```
#include"stdio.h"
main(){
    int n,sum=0;
    printf("Enter your number you want to find sum of digit:");
    scanf("%d",&n);
    while(n>0 || n!=0){
        sum=sum+n%10;
        n=n/10;
    }
```

```
printf("sum of digit: %d",sum); }
```

---

**Task 6:- wap in c to check Armstrong number or not.**

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

```
main(){
```

```
    int num,rem,orgnum,result=0;
```

```
    printf("Enter your number you want to check armstrong:");
```

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

```
    orgnum=num;
```

```
    while(orgnum!=0){
```

```
        rem=orgnum%10;
```

```
        result+=(rem*rem*rem);
```

```
        orgnum/=10;
```

```
    }
```

```
    if(result==num){
```

```
        printf("Entered number is Armstrong: %d",num);
```

```
    }else{
```

```
        printf(" entered number is not armstrong:%d",num);
```

```
    }
```

```
}
```

-----  
**Task 7:- wap in c to check given number is palindrome or not.**

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

```
main(){
```

```
    int n,reverse=0,rem,orgnum;
```

```
    printf("Enter your number you want to check palindrome or  
not:");
```

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

```
    orgnum=n;
```

```
    while(n!=0){
```

```
        rem=n%10;
```

```
        reverse=reverse*10+rem;
```

```
        n/=10;
```

```
    }
```

```
    if(orgnum==reverse){
```

```
        printf("Entered number is palindrome:%d",orgnum);
```

```
    }
```

```
    else
```

```
        printf("Entered number is not palindrome:%d",orgnum);
```

```
}
```

-----

***Tast 8:- wap in c to check given number is prime or not.***

```
#include "stdio.h"
```

```
main(){
```

```
    int num;
```

```
    printf("Enter your number you want to check number is prime or  
not:");
```

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

```
    int count=0;
```

```
    int n=1;
```

```
    while(n<=num){
```

```
        if(num%n==0){
```

```
            count++;
```

```
        }
```

```
        n++;
```

```
    }
```

```
    if(count==2){
```

```
        printf("number is prime");
```



```
}  
else{  
    printf("Number is non-prime:");  
}  
}
```

---

**Task 9:- wap in c to print all alphabet from a to z.**

```
#include "stdio.h"  
main(){  
    for(char i='a';i<='z';i++){  
        printf("%c ",i);  
    }  
}
```

---

**Tast 10:- wap in c to print even number up to given number .**

```
#include "stdio.h"

main(){
    int n;
    printf("Enter your number till which you want even number: ");
    scanf("%d",&n);
    for(int i=1;i<=n;i++){
        if(i%2==0){
            printf(":%d ",i);
        }
    }
}
```

---

***Tast 11:- wap in c to display pattern***

```
#include "stdio.h"

main(){
    int n=5;
    for(int i=1;i<=n;i++){
```

```

        for(int j=1;j<=i;j++){
            printf("* ");
        }
        printf("\n");
    }
}

```

---

***Tast 12:- wap in c to display pattern.(reverse)***

```

#include"stdio.h"
main(){
    int n=5;
    for(int i=5;i>=1;i--){
        for(int j=1;j<=i;j++){
            printf("* ");
        }
        printf("\n");
    }
}

```

---

***Task 13:- wap in c to display pattern....***

```
#include "stdio.h"

main(){
    int n=5;
    for(int i=1;i<=n;i++){
        for(int j=1;j<=i;j++){
            printf("%d ",j);
        }
        printf("\n");
    }
}
```

---

***Task 14:- wap in c to display pattern***

```
#include "stdio.h"

main(){
    int n=5;
    for(int i=5;i>=1;i--){
        for(int j=1;j<=i;j++){
```

```
        printf("%d ",j);
    }
    printf("\n");
}
}
```

---

**Task 15:- wap in c to display following pattern ...**

```
#include"stdio.h"
main(){
    int n=5;
    for(int i=0;i<n;i++){
        //spaces
        for(int j=0;j<n-i-1;j++){
            printf(" ");
        }
        //stars
        for(int j=0;j<2*i+1;j++){
            printf("* ");
        }
    }
}
```

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

---

The end