

## 1 Fibonacci series

```
#include<stdio.h>
int main(){
    int n,a=0,b=1,c,i;
    scanf("%d",&n);
    for(i=1;i<=n;i++){
        printf("%d",c);
        a=b;b=c;
        c=a+b;
    }
}
```

```
#include<stdio.h>
int main(){
    int n,a=0,b=1,c,i;
    scanf("%d",&n);
    for(i=1;i<=n;i++){
        printf("%d ",a);
        c=a+b;
        a=b;b=c;
    }
}
```

## 2 Smallest Prime Number

```
#include<stdio.h>
int main(){
    int n,i,j,flag,count=0;
    scanf("%d",&n);
    for(i=n+1;count<5;i++){
        flag=0;
        for(j=2;j<=n/2;j++){
            if(i%j==0){
                flag=1;
                break;
            }
        }
        if(flag==0){
            printf("%d ",i);
            count++;
        }
    }
}
```

```
    }  
    }  
}
```

### 3 Prime or Composite number

```
#include<stdio.h>  
int main(){  
    int n,i;  
    scanf("%d",&n);  
    int flag=0;  
    for(i=2;i<=n/2;i++){  
        if(n%i==0){  
            flag=1;  
            break;  
        }  
    }  
    if(flag==0){  
        printf("%d is a prime number",n);  
    }  
    else{  
        printf("%d is a composite number",n);  
    }  
}
```

### 4 Series Sum Calculator

```
#include<stdio.h>  
int main(){  
    int n,digits,i,result=0,sum=0;
```

```

scanf("%d %d",&n,&digits);
for(i=0;i<digits;i++){
    result=result*10+n;
    sum+=result;
    printf("%d",result);
    if(i<n){
        printf(" + ");
    }
}
printf("\n%d",sum);
}

```

## 5 Divisor Sum and Equality Checker

```

#include<stdio.h>
int main(){
    int n,i,sum=0;
    scanf("%d",&n);
    for(i=1;i<=n;i++){
        if(n%i==0){
            sum+=i;
            printf("%d ",i);
        }
    }
    printf("\n%d",sum);
    if(sum==n){
        printf("\n%d is an equal number",sum);
    }
    else{
        printf("\n%d is not an equal number",sum);
    }
}

```