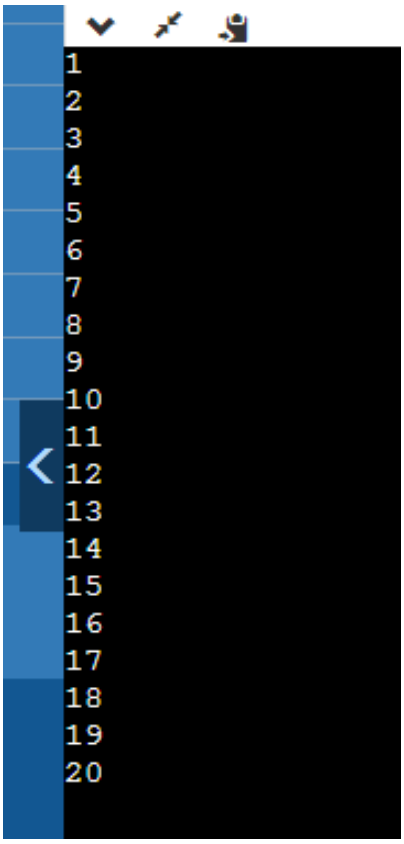
C++ ASSIGNMENT 1.2

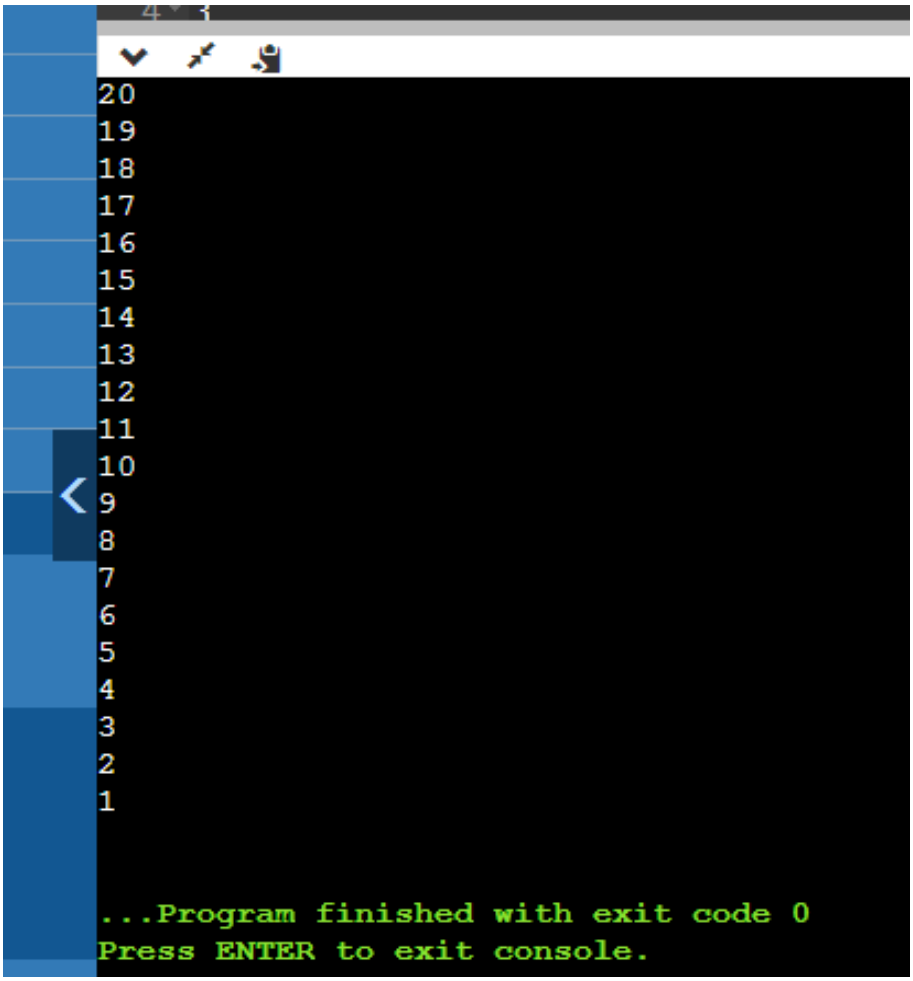
1. WAP for printing all natural numbers till 20.

```
#include<iostream>
using namespace std;
int main()
{
for(int a=1;a<=20;a++)
{
   cout<<a<<"\n";
}
return 0;
}
```



2. WAP for printing all natural numbers in reverse order starting from 20.

```
#include<iostream>

using namespace std;

int main()

{

for(int a=20;a>=1;a--)

{

    cout<<a<<"\n";

}

return 0;

}
```

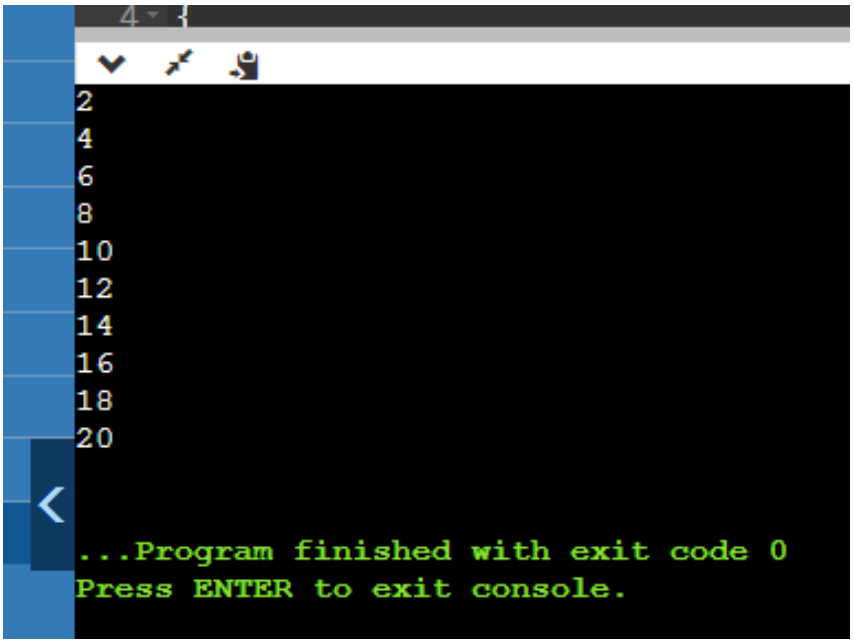


3. WAP for printing all even numbers from 1 to 20.

```
#include<iostream>

using namespace std;

int main()

{

for(int a=1;a<=20;a++)

{

   if((a%2)==0)

   cout<<a<<"\n";

}
```

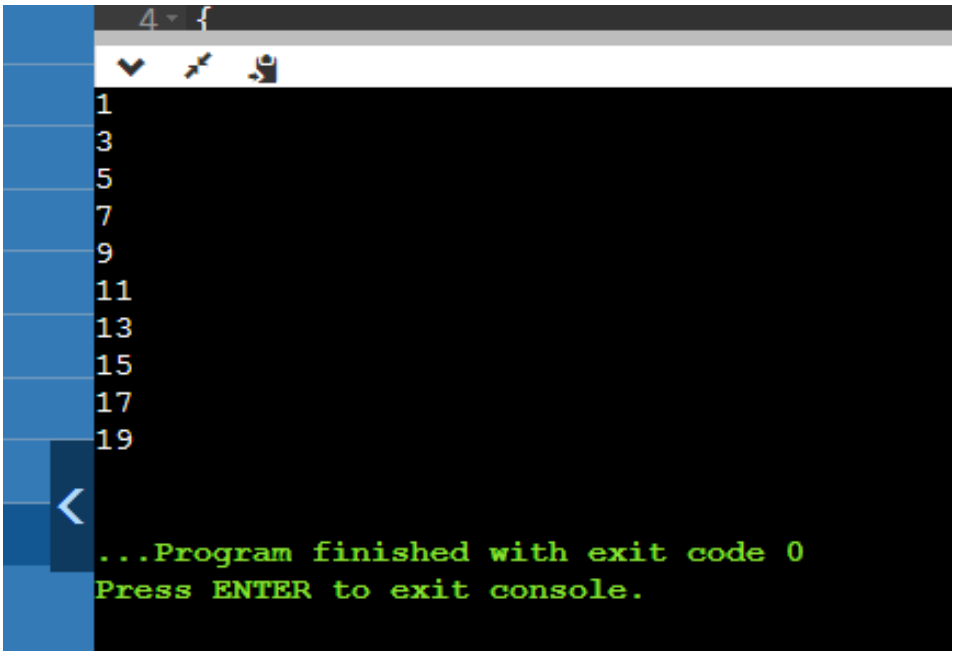
return 0;

}



4. WAP for printing all odd numbers from 1 to 20.

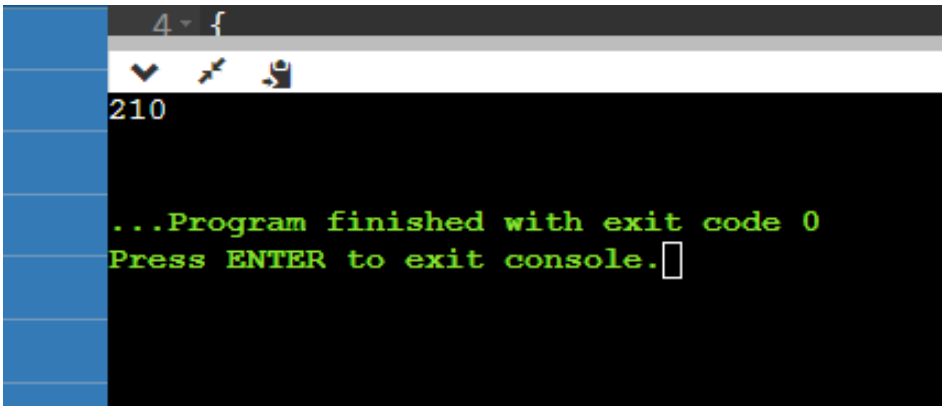
```
#include<iostream>
using namespace std;
int main()
{
for(int a=1;a<=20;a++)
{
   if((a%2)!=0)
   cout<<a<<"\n";
}
return 0;
}
```



5. WAP for adding all numbers from 1 to 20.

```
#include<iostream>

using namespace std;

int main()

{

   int a,b,c;

for(int a=0;a<=20;a++)

{


b=b+a;




}
```

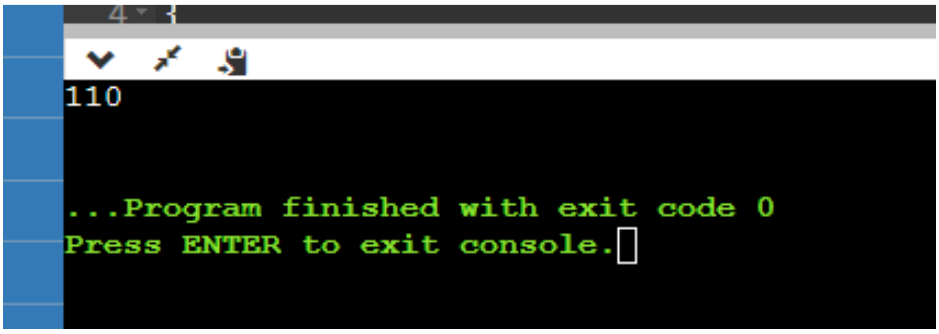
```
 cout<<b<<"\n";
return 0;
}
```



6. WAP for finding sum of all even numbers till 20.

```
#include<iostream>
using namespace std;
int a,b,c;
int main()
{
for(int a=0;a<=20;a++)
{

if(a%2==0)
b=b+a;



}
```

```
   cout<<b<<"\n";


return 0;

}
```

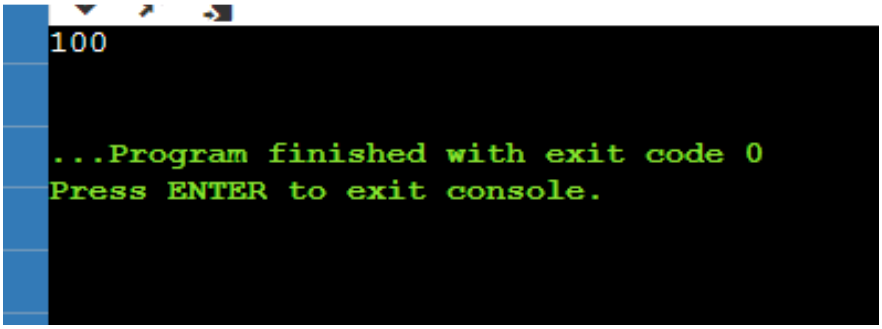


7. WAP for finding sum of all odd numbers till 20.

```
#include<iostream>

using namespace std;

int a,b,c;

int main()

{

for(int a=0;a<=20;a++)

{


if(a%2!=0)

b=b+a;




}

   cout<<b<<"\n";
```

return 0;

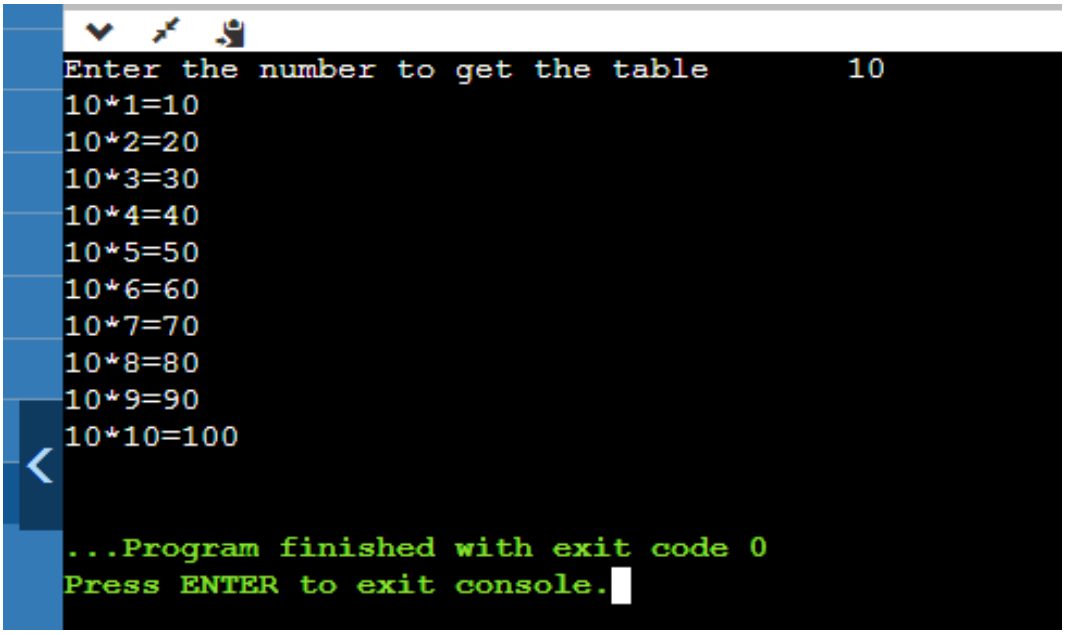
}



8. WAP for printing multiplication table of a number. For eg. Display should be " 2 X 1 = 2".

```
#include<iostream>

using namespace std;

int main()

{

int a,b,c;

cout<<"Enter the number to get the table    \t";


cin>>a;


for(int i=1;i<=10;i++)

{

   cout<<a<<"*"<<i<<"="<<a*i<<"\n";

}



return 0;
```

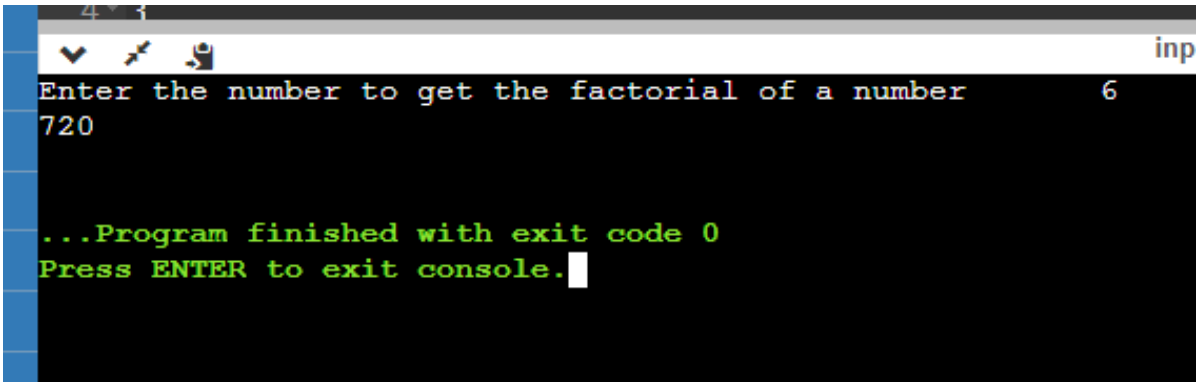
}



9. WAP to calculate factorial of a number.

```
#include<iostream>

using namespace std;

int main()

{

int a,b,c=1;

cout<<"Enter the number to get the factorial of a number   \t";


cin>>b;


for(int i=1;i<=b;i++)

{

   c=c*i;

}
```

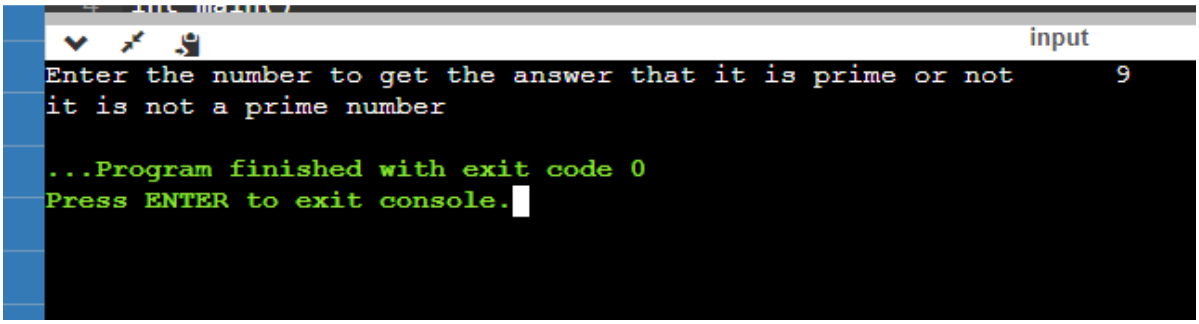
```
cout<<c<<"\n";


return 0;

}
```



10. WAP to check whether a number is prime or not.

```
#include<iostream>

using namespace std;


int main()

{

int flag=1,b,i;

cout<<"Enter the number to get the answer that it is prime or not   \t";


cin>>b;


for(i=2;i<b;i++)

{if(b%i==0)

{

 flag=0;
```

```
 break;
}
}
if (flag)

cout<<"it is a prime number";
  else
  cout<<"it is not a prime number";
return 0;
}
```



11. WAP to print all digits of a number and their sum.

```
#include<iostream>
using namespace std;

int main()
{
int num,sum=0,b;
cout<<"Enter the number to get sum of all its digits  \t";

cin>>num;
while(num>0)
```

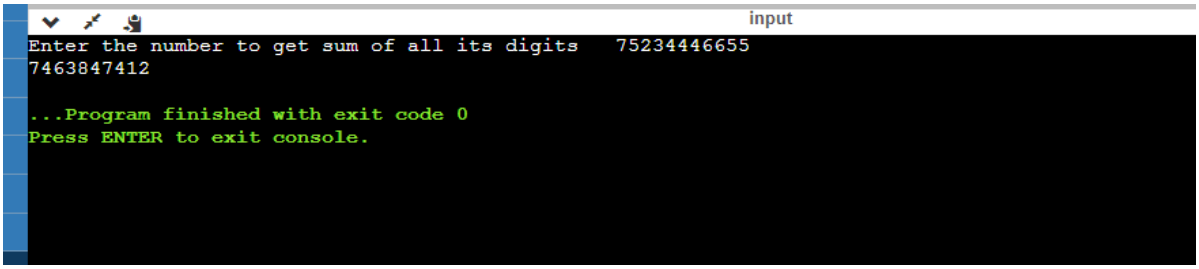
```
{
   b=num%10;
   sum=sum+b;

   num=num/10;
}
cout<<sum;
return 0;
}
```

```
Enter the number to get sum of all its digits   2534789
38

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

12. WAP to print reverse of a number.

```
#include<iostream>
using namespace std;

int main()
{
int num,sum=0,b;
cout<<"Enter the number to get sum of all its digits  \t";

cin>>num;
while(num>0)
{
   b=num%10;
```

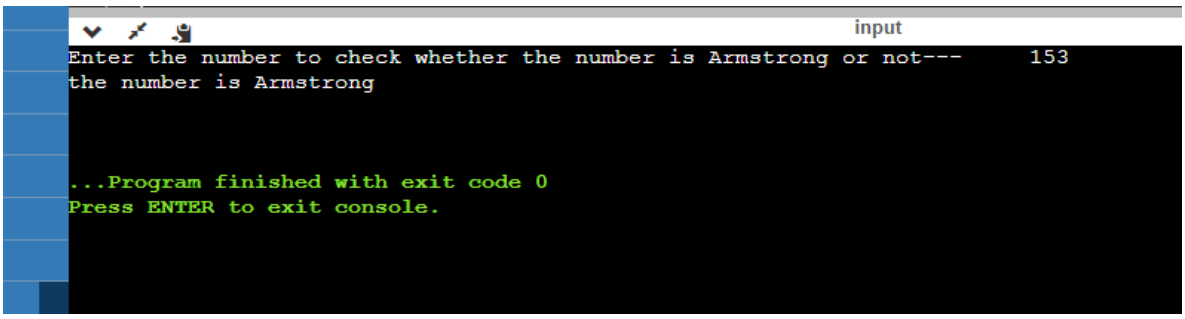
```
    num=num/10;
cout<<b;


}


return 0;
}
```



13. WAP to check whether the number is Armstrong or not.

```
#include<iostream>
using namespace std;
int main()
{
   int a,b,c,num,sum=0;
   cout<<"Enter the number to check whether the number is Armstrong or not---  \t";
   cin>>num;
   c=num;
   while(num>0)
   {
      b=num%10;
      a=b*b*b;
```

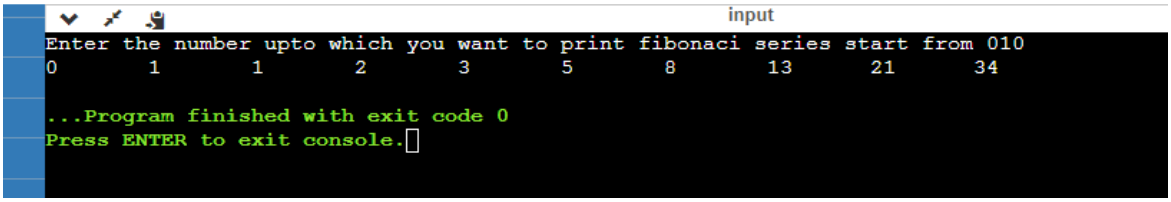
```
        sum=sum+a;


        num=num/10;
    }
    if(sum==c)
    {
        cout<<"the number is Armstrong"<<endl;
    }
    else
    {
    cout<<"    the number is not  Armstrong ";
    }
        cout<<endl;



    return 0;
}
```



14. WAP to print the Fibonacci series in a given range.

```
#include<iostream>

using namespace std;

int main()
```

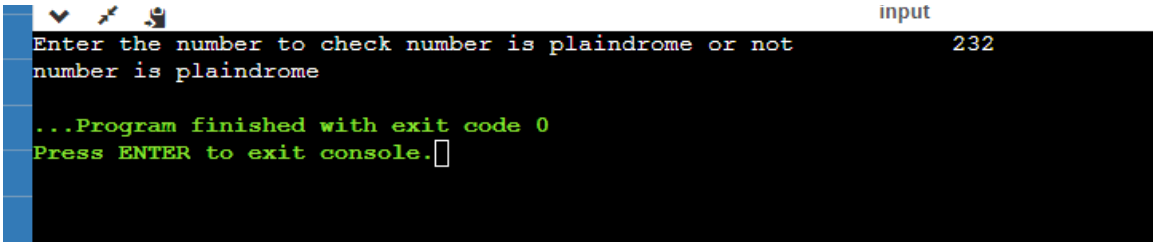
```
{
int a=0,sum,b=1,c;
sum=a+b;
cout<<"Enter the number upto which you want to print fibonaci series start from 0";
cin>>c;
cout<<a<<"\t"<<b<<"\t";
for(int i=3;i<=c;i++)
{cout<<sum<<"\t";

a=b;
b=sum;
sum=a+b;
}
return 0;
}
```



15. WAP to check whether the number entered is palindrome or not.

```
#include<iostream>
using namespace std;
int main()
{
int i=0,a,b,c,d,sum=0;
```

```
cout<<"Enter the number to check number is plaindrome or not    \t";
cin>>c;
d=c;

while(0<c)
{
   b=c%10;
   sum=sum*10+b;
   c=c/10;
   i++;

}
if(sum==d)
{
   cout<<"number is plaindrome";
}
else
{
   cout<<"number is not plaindrome";
}

return 0;
}
```


input
Enter the number to check number is plaindrome or not 232
number is plaindrome
...Program finished with exit code 0
Press ENTER to exit console.