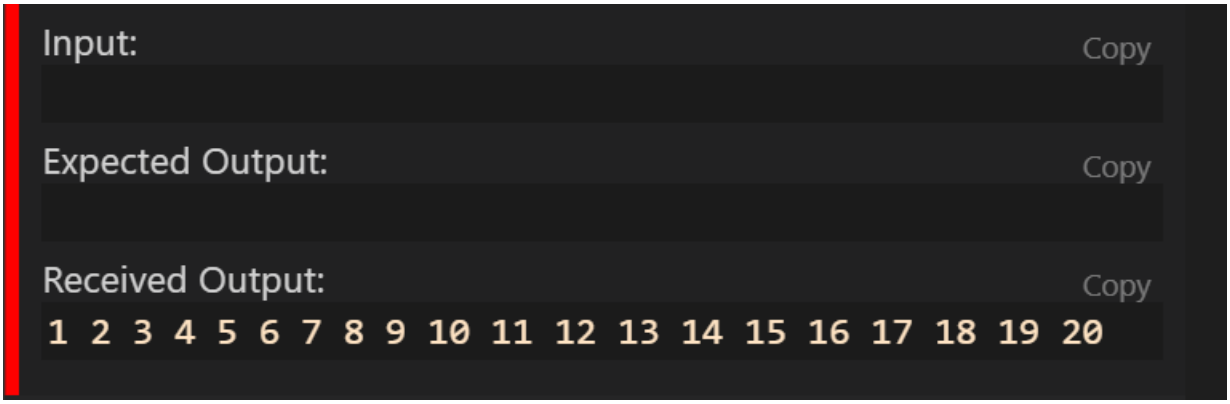
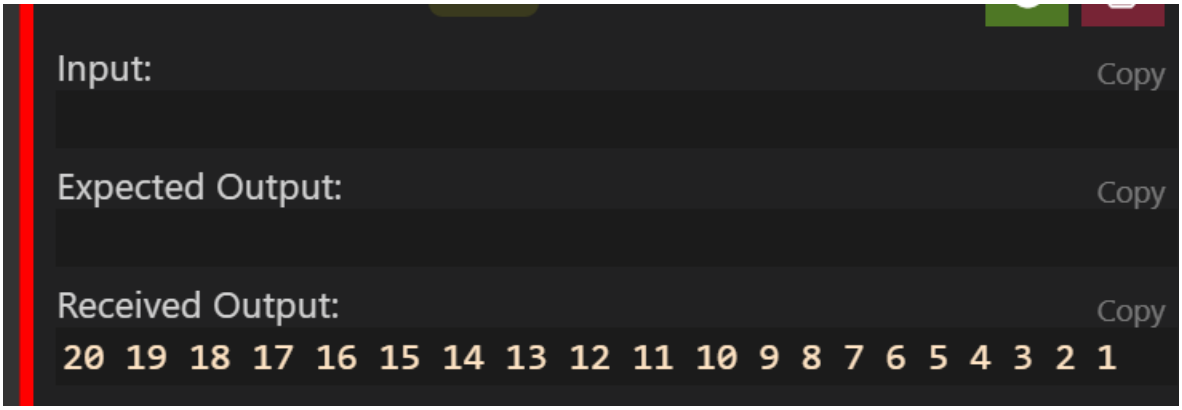
1. WAP for printing all natural numbers till 20.

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



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

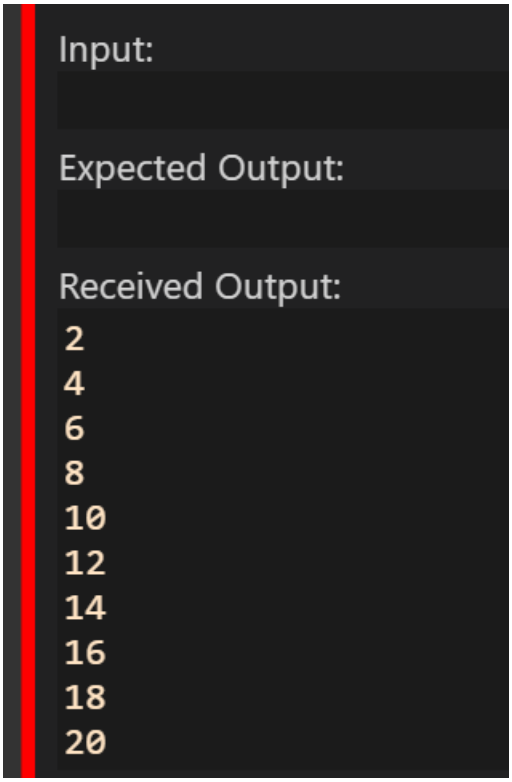
```
#include <iostream>
using namespace std;
int main()
{
    for (int i = 20; i >= 1; i--)
    {
        cout << i << endl;
    }
    return 0;
}
```



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

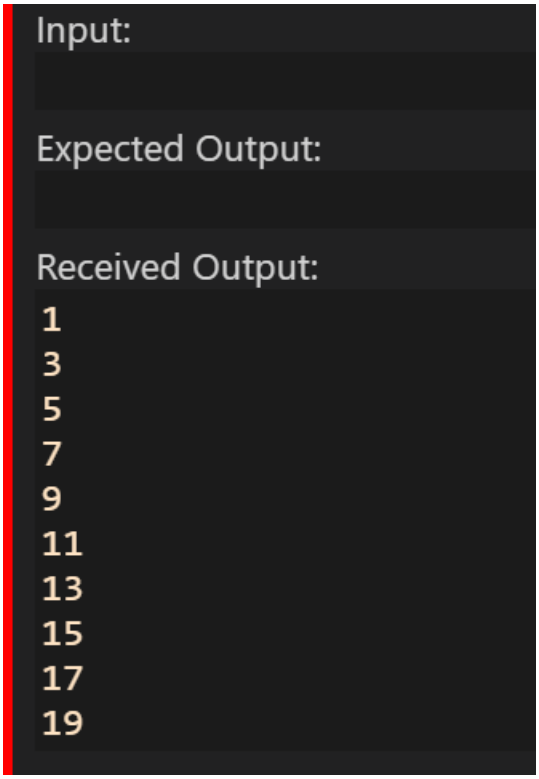
```
#include <iostream>
using namespace std;
int main()
{
    for (int i = 1; i <= 20; i++)
    {
        if (i % 2 == 0)
        {
            cout << i << endl;
        }
    }
```

```
    return 0;
}
```



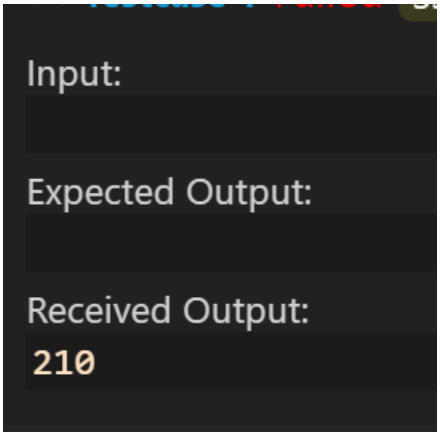
4. WAP for printing all odd numbers from 1 to 20.

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



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

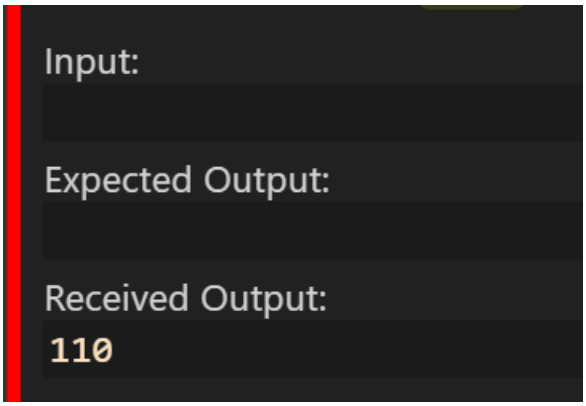
```cpp
#include <iostream>
using namespace std;
int main()
{
    int sum = 0;
    for (int i = 1; i <= 20; i++)
    {
        sum = sum + i;
    }
    cout << sum << endl;
    return 0;
}
```



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

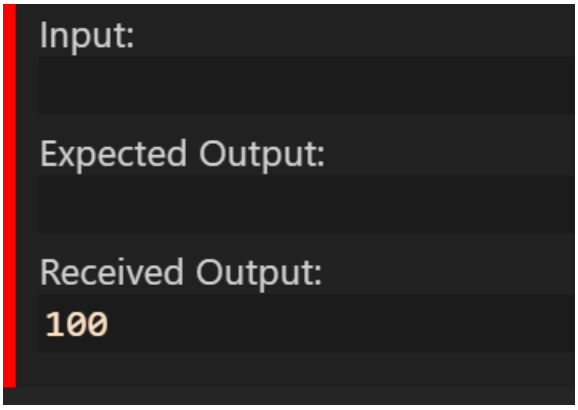
```cpp
#include <iostream>
using namespace std;
```

```cpp
int main()
{
    int sum = 0;
    for (int i = 1; i <= 20; i++)
    {
        if (i % 2 == 0)
        {
            sum = sum + i;
        }
    }
    cout << sum;
    return 0;
}
```



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

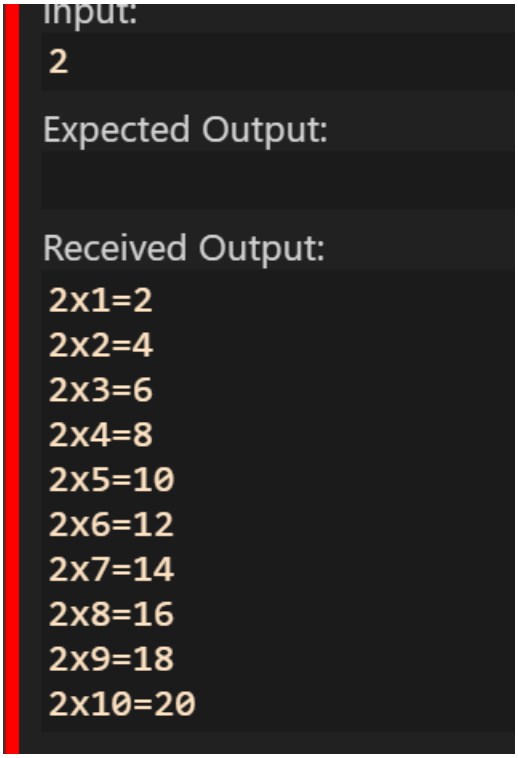
```cpp
#include <iostream>
using namespace std;
int main()
{
    int sum = 0;
    for (int i = 1; i <= 20; i++)
    {
        if (i % 2 != 0)
        {
            sum = sum + i;
        }
    }
    cout << sum;
    return 0;
}
```



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

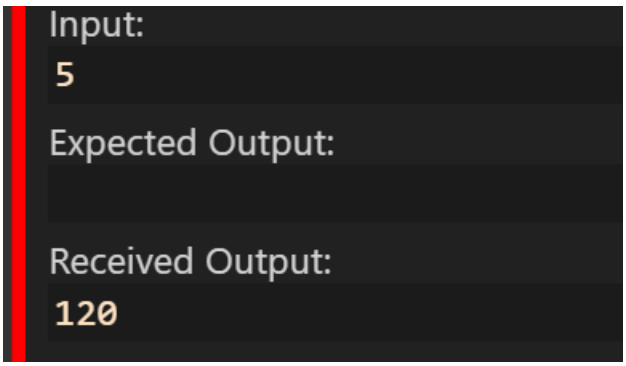
```cpp
#include <iostream>
using namespace std;
int main()
{
    int num;
```

```
    cin >> num;
    for (int i = 1; i <= 10; i++)
    {
        cout << num << "x" << i << "=" << num * i << endl;
    }
    return 0;
}
```



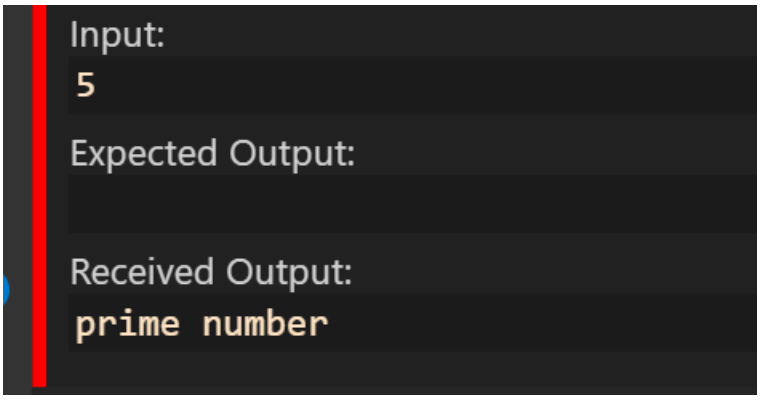
9. WAP to calculate factorial of a number.

```
#include <iostream>
using namespace std;
int main()
{
    int num;
    cin >> num;
    int fact = 1;
    for (int i = 1; i <= num; i++)
    {
        fact = fact * i;
    }
    cout << fact << endl;
    return 0;
}
```



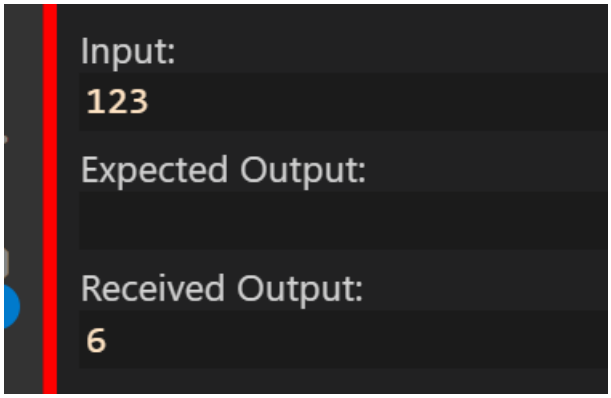
10. WAP to check whether a number is prime or not.

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

bool isPrime(int n)
{
    if (n == 0 || n == 1)
    {
        return false;
    }
    for (int i = 2; i * i < n; i++)
    {
        if (n % i == 0)
        {
            return false;
        }
    }
    return true;
}

int main()
{
    int n;
    cin >> n;
    if (isPrime(n))
    {
        cout << "prime number";
    }
    else
    {
        cout << "not a prime number";
    }
    return 0;
}
```



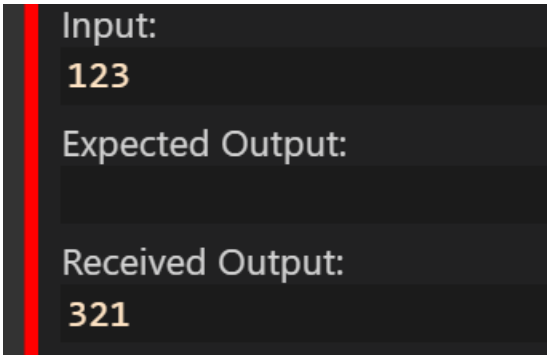
11. WAP to print all digits of a number and their sum.

```cpp
#include <iostream>
using namespace std;
int main()
{
    int n;
    cin >> n;
    int sum = 0;
    while (n > 0)
    {
        int lastDigit = n % 10;
        sum = sum + lastDigit;
        n = n / 10;
    }
    cout << sum;
    return 0;
}
```



12. WAP to print reverse of a number.

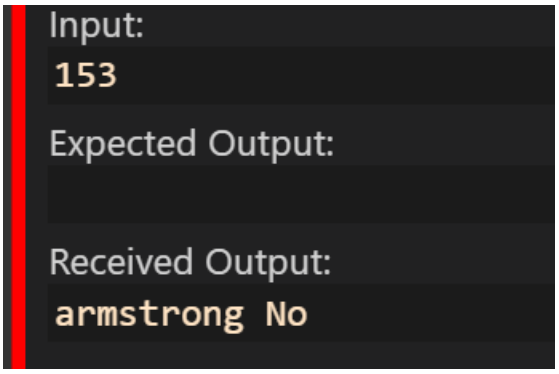
```cpp
#include <iostream>
using namespace std;
int main()
{
    int n;
    cin >> n;
    int reverseNum = 0;
    while (n > 0)
    {
        int lastDigit = n % 10;
        reverseNum = reverseNum * 10 + lastDigit;
        n = n / 10;
    }
    cout << reverseNum;
    return 0;
}
```



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

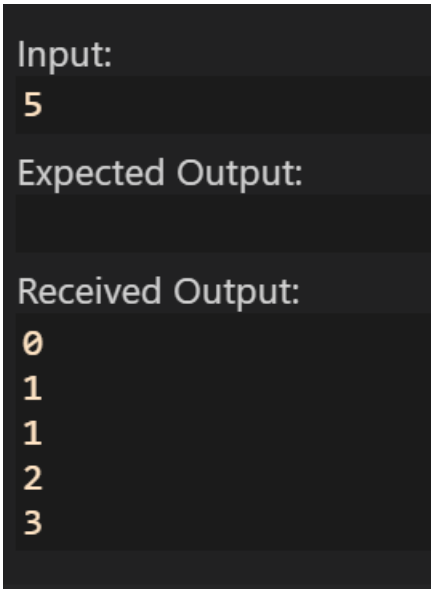
```cpp
#include <bits/stdc++.h>
using namespace std;
int main()
{
    int n;
    cin >> n;
    int sum = 0;
    int originalNum = n;
    int digit = 0;
    while (n > 0)
    {
        int lastDigit = n % 10;
        digit++;
        n = n / 10;
    }
    n = originalNum;
    while (n > 0)
    {
        int lastDigit = n % 10;
        sum += pow(lastDigit, digit);
        n = n / 10;
    }
    if (originalNum == sum)
    {
```

```
        cout << "armstrong No";
    }
    else
    {
        cout << "not a armstrong no";
    }
    return 0;
}
```



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

```
#include <iostream>
using namespace std;
int main()
{
    int n;
    cin >> n;
    int fib[n + 1];
    fib[0] = 0;
    fib[1] = 1;
    for (int i = 2; i <= n; i++)
    {
        fib[i] = fib[i - 1] + fib[i - 2];
    }
    for (int i = 0; i < n; i++)
    {
        cout << fib[i] << endl;
    }
    return 0;
}
```



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

```cpp
#include <iostream>
using namespace std;
int main()
{
    int n;
    cin >> n;
    int originalNum = n;
    int reverseNum = 0;
    while (n > 0)
    {
        int lastDigit = n % 10;
        reverseNum = reverseNum * 10 + lastDigit;
        n = n / 10;
    }
    if (originalNum == reverseNum)
    {
        cout << "palindrome no";
    }
    else
    {
        cout << "not a palindrome no";
    }
    return 0;
}
```