

Q1

```
#include <iostream>
using namespace std;
void print(int Start, int End){
    if(Start>End){
        return;
    }
    cout<<Start<<" ";
    print(Start+1, End);
}
int main(){
    int End;
    cout<<"enter N: "<<endl;
    cin>>End;
    int Start;
    cout<<"enter num"<<endl;
    cin>>Start;
    print(Start, End);
}
```

Q2

```
#include <iostream>
using namespace std;
void reverse(int N){
    if(N==0){
        return;
    }
    cout<<N<<" ";
    reverse(N-1);
}
```

```
int main(){
    int N;
    cout<<"enter value of N: "<<endl;
    cin>>N;
    reverse(N);
    return 0;
}
```

Q3

```
#include <iostream>
using namespace std;
int sum(int n) {
    if (n == 0) {
        return 0;
    } else {
        int result = n + sum(n - 1);
        return result;
    }
}
```

```

int main() {
    int n;
    cin >> n;
    cout << "Sum = " << sum(n);
    return 0;
}

```

Q4

```

#include <iostream>
#include <string>
using namespace std;
string reverseString(string s) {
    if (s.length() <= 1)
        return s;
    return s.back() + reverseString(s.substr(0, s.length() - 1));
}
int main() {
    string s;
    cin >> s;
    cout << reverseString(s) << endl;
    return 0;
}

```

Q5

```

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

```

Q6

```

#include <iostream>
using namespace std;
int climbStairs(int n) {
    if (n == 0) return 1;
    if (n < 0) return 0;
    return climbStairs(n - 1) + climbStairs(n - 2);
}

```

```

int main() {

```

```
int n;  
cin >> n;  
cout << climbStairs(n) << endl;  
return 0;  
}
```

Q7

```
#include <iostream>  
using namespace std;  
int factorial(int n) {  
    if (n <= 1)  
        return 1;  
    return n * factorial(n - 1);  
}
```

```
int main() {  
    int n;  
    cin >> n;  
    cout << factorial(n) << endl;  
    return 0;  
}
```

Q8

```
#include <iostream>  
using namespace std;  
int fibonacci(int n) {  
    if (n == 1 || n == 2)  
        return 1;  
    return fibonacci(n - 1) + fibonacci(n - 2);  
}
```

```
int main() {  
    int n;  
    cin >> n;  
    cout << fibonacci(n) << endl;  
    return 0;  
}
```