

1) Swap two numbers

```
#include <iostream>

class Solution {
public:
    void swapNumbers(int &a, int &b) {
        a=a^b;
        b=a^b;
        a=a^b;
    }
};

int main() {
    Solution solution;
    int a = 5, b = 3;
    solution.swapNumbers(a, b);
    std::cout << "Swapped values: a = " << a << ", b = " << b <<
std::endl;
    return 0;
}
```

2) Odd or Even

```
#include <iostream>

#include <vector>
```

```

class Solution {
public:
    void printOddEvenNumbers(int start, int end, std::vector<int>&
        odds, std::vector<int>& evens) {
        int i;
        for(i=start;i<=end;i++)
        {
            if(i%2==0) evens.push_back(i);
            else odds.push_back(i);
        }
    }
};

int main() {
    Solution solution;
    std::vector<int> odds, evens;
    solution.printOddEvenNumbers(27, 48, odds, evens);
    std::cout << "Odd numbers: ";
    for (int num : odds) std::cout << num << " ";
    std::cout << "\nEven numbers: ";
    for (int num : evens) std::cout << num << " ";
    std::cout << std::endl;
}

```

```
    return 0;
}
```

3)Add Maximum of two digits

```
#include <iostream>

#include<climits>

class Solution {
public:
    int maxSum(int a, int b, int c) {
        int result = 0,add=INT_MIN;
        if(add<a+b) add=a+b;
        if(add<b+c) add=b+c;
        if(add<c+a) add=c+a;
        result=add;
        return result;
    }
};

int main() {
    Solution solution;
    int a = 8, b = 7, c = 9;
    int result = solution.maxSum(a, b, c);
    std::cout << "Maximum sum of two numbers: " << result <<
```

```
        std::endl;

    return 0;

}
```

4)Decimal To Binary

```
#include <iostream>

#include <string>

using namespace std;

class Solution {

public:

    std::string findBinary(int num) {

        std::string result;

        char digit;

        while(num>0){

            digit=num%2;

            result=to_string(digit)+result;

            num/=2;

        }

        return result;

    }

};
```

```
int main() {  
    Solution solution;  
  
    int num = 4;  
  
    std::string result = solution.findBinary(num);  
  
    std::cout << "Binary representation: " << result << std::endl;  
  
    return 0;  
}
```

5)GCD

```
#include <iostream>  
  
class Solution {  
public:  
    int gcd(int a, int b) {  
        int result = 0;  
        int temp;  
        while(b>0)  
        {  
            temp=a%b;  
            a=b;  
            b=temp;  
        }  
    }  
}
```

```
        result=a;

        return result;

    }

};

int main() {

    Solution solution;

    int a = 20, b = 16;

    int result = solution.gcd(a, b);

    std::cout << "GCD: " << result << std::endl;

    return 0;

}
```