

## ***Solutions for Coding Test 4***

### **ARTS AND CRAFTS**

#### **C++:**

```
#include <iostream>
#include <vector>
#include <set>
#include <iterator>
#include <algorithm>
#include <stddef.h>
#include <string>
#include <cmath>

using namespace std;

int main()
{
    ios_base::sync_with_stdio(false);
    cin.tie(NULL);

    long long int t, a, b, c, d;
    cin >> t;
    vector<int> v;
    for (int i = 0; i < t; i++) {
        cin >> a >> b >> c;
        cout << a + b + c - 1 << endl;
    }
    return 0;
}
```

#### **Java:**

```
import java.util.*;
public class Fence {
    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        int T = in.nextInt();
        for (int t = 0; t < T; t++) {
            System.out.println((long)in.nextInt() + in.nextInt() + in.nextInt() - 1);
        }
    }
}
```

#### **Python:**

```
for i in range(int(input())):
    l=sum(map(int,input().split()))
    print(l-1)
```

### **Set of clothes:**

#### **Java:**

```
import java.util.*;
public class Main
{
    public static void main(String ar[])
```

```

{
Scanner s=new Scanner(System.in);
int x;
int m=s.nextInt();
int n=s.nextInt();
int o=s.nextInt();
int p=s.nextInt();
int a=s.nextInt();
int b=s.nextInt();
if(a>b)
x=Math.min(m,p)*a+Math.min(p-Math.min(m,p),Math.min(n,o))*b;
else
x=Math.min(Math.min(n,o),p)*b+Math.min(p-Math.min(Math.min(n,o),p),m)*a;
System.out.println(x);
}
}

```

### C++:

```

#include <map>
#include <set>
#include <list>
#include <cmath>
#include <ctime>
#include <deque>
#include <queue>
#include <stack>
#include <string>
#include <bitset>
#include <cstdio>
#include <limits>
#include <vector>
#include <climits>
#include <cstring>
#include <cstdlib>
#include <fstream>
#include <numeric>
#include <sstream>
#include <iostream>
#include <algorithm>
#include <unordered_map>

using namespace std;
int main() {
    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    int m,n,o,p,a,b;
    cin>>m>>n>>o>>p>>a>>b;

    int firstset = 0, secondset = 0;

    if(a > b)
    {
        while(m > 0 && p > 0)
        {
            firstset++;
            m--;
            p--;
        }
    }
}

```

```

        while(n > 0 && o > 0 && p > 0)
        {
            secondset++;
            n--;
            o--;
            p--;
        }
    }
    else
    {
        while(n > 0 && o > 0 && p > 0)
        {
            secondset++;
            n--;
            o--;
            p--;
        }

        while(m > 0 && p > 0)
        {
            firstset++;
            m--;
            p--;
        }
    }

    cout<<((firstset * a) + (secondset * b))<<endl;

    return 0;
}

```

## Python:

```

m,n,o,p,a,b =[int(input())for _ in[0]*6]
x,y=min(m,p),min(n,o,p)
print(max(x*a+min(n,o,p-x)*b,y*b+min(m,p-y)*a))

```