

SOLUTIONS

Round 1:

Prob-1:

```
#include <iostream>

int n = printf("Hello World");

int main() {}
```

Prob-2:

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

int main() {
    int n=4; // no. of soldiers
    int a[] = { 11, 12, 13, 14 };
    int lucky=0,unlucky=0;
    //for(int i=0;i<n;i++){
        //store no. of weapons by particular soldier in an array
        //cin>>a[n];
    //}

    for(int i=0;i<n;i++)
    {
        if(a[i]%2==0) //condition for checking whether no. of weapons even or
not
            lucky++; // if satisfies increase lucky count by one
        else
            unlucky++; //else increase unlucky
    }

    if(lucky>unlucky)
        cout<<"READY FOR BATTLE"<<endl; //display as per the required o/p
    else
        cout<<"NOT READY"<<endl;
    return 0;
}
```

Prob-3:

```
#include <stdio.h>
```

```
// 59 is an ASCII value of the semicolon
```

```
#define SEMICOLON 59
```

```
int main()
```

```
{
```

```
    if (printf("%c", SEMICOLON)) {}
```

```
    // if (putchar(SEMICOLON)) {}
```

```
}
```

Prob-4:

```
int add(int a=-2, int b=-3) {
```

```
    return a-(-b);
```

```
}
```

Round 2:

Prob-1:

```
#include <bits/stdc++.h>
```

```
using namespace std;
```

```
int main() {  
    // your code goes here  
    int t;cin>>t;  
    while(t--)  
    {  
        int n;cin>>n; int a[n]; int sum=0;  
        for(int i=0;i<n;i++)  
        {  
            cin>>a[i];  
            sum=sum+a[i];  
        }  
        if (n%2==0)  
            {cout<<abs(sum)/2<<endl;}  
        else  
            cout<<"-1"<<endl;  
    }  
    return 0;  
}
```

Prob-2:

```
#include <bits/stdc++.h>
```

```
using namespace std;
```

```
// Function to return the maximum water that can be stored
```

```
int maxWater(int arr[], int n)
```

```
{
```

```
    // To store the maximum water that can be stored
```

```
    int res = 0;
```

```
    // For every element of the array
```

```
    for (int i = 1; i < n - 1; i++) {
```

```
        // Find the maximum element on its left
```

```
        int left = arr[i];
```

```
        for (int j = 0; j < i; j++)
```

```
            left = max(left, arr[j]);
```

```
        // Find the maximum element on its right
```

```
        int right = arr[i];
```

```
        for (int j = i + 1; j < n; j++)
```

```
            right = max(right, arr[j]);
```

```
        // Update the maximum water
```

```
        res = res + (min(left, right) - arr[i]);
```

```
    }
```

```
    return res;
```

```
}
```

```
// Driver code
```

```
int main()
{
    int arr[] = { 0, 1, 0, 2, 1, 0, 1, 3, 2, 1, 2, 1 };
    int n = sizeof(arr) / sizeof(arr[0]);

    cout << maxWater(arr, n);

    return 0;
}
```

Round 3:

Prob: