



## Experiment - 4

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**Branch:** CSE

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**Subject Name:** Competitive Coding lab

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### PROBLEM STATEMENT:- (Missing Numbers)

Given two arrays of integers, find which elements in the second array are missing from the first array.

### CODE :-

```
vector<int> missingNumbers(vector<int> arr, vector<int>
brr) {map<int, int> arr_1;
map<int, int> brr_1;
for(int i
=0;i<arr.size();i++){
arr_1[arr[i]]++;
}
for(int i
=0;i<brr.size();i++){
brr_1[brr[i]]++;
}
vector<int> ans;
```



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```
map<int, int> :: iterator j =
arr_1.begin();for(auto i : brr_1){
if(i.first == j->first){
if(j != arr_1.end()){
if(i.second == j-
>second){j++;
}
else{
ans.push_back(i.first)
;j++;
}
}
}
else{
ans.push_back(i.first);
}
}
return ans;
}
```

## OUTPUT :-

The screenshot displays a code execution environment with the following components:

- Test Cases:** A list on the left shows five test cases, all marked as successful with green checkmarks.
- Compiler Message:** A box indicating "Success".
- Input (stdin):** A table showing input data for four test cases.

Line	Input
1	10
2	203 204 205 206 207 208 203 204 205 206
3	13
4	203 204 204 205 206 207 205 208 203 206 205 206 204
- Expected Output:** A box showing the output for the first test case: "204 205 206".

### **PROBLEM STATEMENT :-    (Pairs)**

Given an array of integers and a target value, determine the number of pairs of array elements that have a difference equal to the target value.

### **CODE :-**

```
int pairs(int k, vector<int> arr)
{unordered_map<int, int> m;
int count = 0;
for(int i = 0; i<arr.size();
i++){m[arr[i]]++;
}
for(int i = 0; i<arr.size();
i++){if(m[arr[i] + k]){
count++;
}
}
return count;
}
```

## OUTPUT :-

