

PROBLEM 4 : SORTING IN A SPECIFIC ORDER

1 Problem Statement

Given an integer vector, your task is to implement a function `sort` that sorts the vector using the following order.

- All even numbers appear before all the odd numbers.
- Even and odd numbers are arranged from largest one to smallest one, respectively.

p4.cpp

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

void sort(vector<int> &arr){
}

int main(){
    int i,j;
    vector<int> num;
    while(cin>>j)
        num.push_back(j);

    sort(num);
    std::cout<<"Sorted result: ";
    for(i=0;i<num.size();i++){
        std::cout<<num[i]<<" ";
    }
    std::cout<<std::endl;
    return 0;
}
```

1.1 Sample Input

11 2 3 4 1000000 999 9 123 33 444 5 6 6 6 6 6 6 6 6 6 6

1.2 Sample Output

Sorted result: 1000000 444 6 6 6 6 6 6 6 6 6 6 4 2 999 123 33 11 9 5 3