Full Name:	Utkarsh Mishra
Email:	utkarshmishra.jyp@gmail.com
Test Name:	**Mock Test**
Taken On:	23 Aug 2025 22:24:39 IST
Time Taken:	38 min/ 105 min
Invited by:	Ankush
Invited on:	23 Aug 2025 22:24:00 IST
Skills Score:	
Tags Score:	Algorithms 255/255 Core CS 255/255 Data Structures 60/60 Disjoint Set 60/60 Graph Theory 100/100 Medium 195/195 Search 95/95 problem-solving 195/195

100%

255/255

scored in **Mock Test** in 38 min on 23 Aug 2025 22:24:39 IST

Recruiter/Team Comments:

No Comments.

Plagiarism flagged

We have marked questions with suspected plagiarism below. Please review it in detail here -

	Question Description	Time Taken	Score	Status
Q1	Breadth First Search: Shortest Reach > **Coding**	12 min 35 sec	100/ 100	!
Q2	Components in a graph > **Coding**	14 min 32 sec	60/ 60	✓
Q3	Cut the Tree > **Coding**	10 min 8 sec	95/ 95	✓

QUESTION 1

Needs Review

Score 100

Breadth First Search: Shortest Reach > Coding

Graph Theory | Algorithms | Medium | problem-solving | Core CS

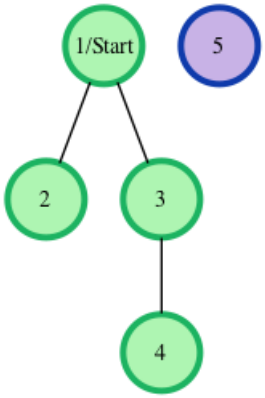
QUESTION DESCRIPTION

Consider an undirected graph where each edge weighs 6 units. Each of the nodes is labeled consecutively from 1 to n.

You will be given a number of queries. For each query, you will be given a list of edges describing an undirected graph. After you create a representation of the graph, you must determine and report the shortest distance to each of the other nodes from a given starting position using the *breadth-first search* algorithm (BFS). Return an array of distances from the start node in node number order. If a node is unreachable, return -1 for that node.

Example

The following graph is based on the listed inputs:



$n = 5$ // number of nodes
$m = 3$ // number of edges
$edges = [1, 2], [1, 3], [3, 4]$
$s = 1$ // starting node

All distances are from the start node 1. Outputs are calculated for distances to nodes 2 through 5: $[6, 6, 12, -1]$. Each edge is 6 units, and the unreachable node 5 has the required return distance of -1.

Function Description

Complete the *bfs* function in the editor below. If a node is unreachable, its distance is -1.

bfs has the following parameter(s):

- *int n*: the number of nodes
- *int m*: the number of edges
- *int edges[m][2]*: start and end nodes for edges
- *int s*: the node to start traversals from

Returns

int[n-1]: the distances to nodes in increasing node number order, not including the start node (-1 if a node is not reachable)

Input Format

The first line contains an integer q, the number of queries. Each of the following q sets of lines has the following format:

- The first line contains two space-separated integers n and m, the number of nodes and edges in the graph.
- Each line i of the m subsequent lines contains two space-separated integers, u and v, that describe an edge between nodes u and v.
- The last line contains a single integer, s, the node number to start from.

Constraints

- $1 \leq q \leq 10$
- $2 \leq n \leq 1000$
- $1 \leq m \leq \frac{n \cdot (n-1)}{2}$
- $1 \leq u, v, s \leq n$

Sample Input

```
2
4 2
1 2
1 3
1
3 1
2 3
2
```

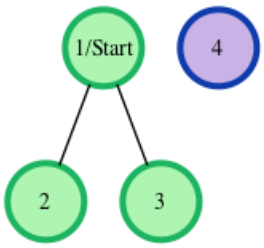
Sample Output

```
6 6 -1
-1 6
```

Explanation

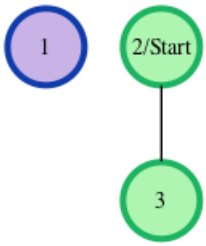
We perform the following two queries:

1. The given graph can be represented as:



where our *start* node, s, is node 1. The shortest distances from s to the other nodes are one edge to node 2, one edge to node 3, and an infinite distance to node 4 (which it is not connected to). We then return an array of distances from node 1 to nodes 2, 3, and 4 (respectively): $[6, 6, -1]$.

2. The given graph can be represented as:



where our *start* node, s, is node 2. There is only one edge here, so node 1 is unreachable from node 2 and node 3 has one edge connecting it to node 2. We then return an array of distances from node 2 to nodes 1, and 3 (respectively): $[-1, 6]$.

Note: Recall that the actual length of each edge is 6, and we return -1 as the distance to any node that is unreachable from s.

CANDIDATE ANSWER

Language used: **C++14**

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

using namespace std;

string ltrim(const string &);
string rtrim(const string &);
vector<string> split(const string &);


```

```cpp
/*
 * Complete the 'bfs' function below.
 *
 * The function is expected to return an INTEGER_ARRAY.
 * The function accepts following parameters:
 *  1. INTEGER n
 *  2. INTEGER m
 *  3. 2D_INTEGER_ARRAY edges
 *  4. INTEGER s
 */

vector<int> bfs(int n, int m, vector<vector<int>> edges, int s) {
    vector<vector<int>> adj(n+1);
    for(auto &e : edges){
        adj[e[0]].push_back(e[1]);
        adj[e[1]].push_back(e[0]);
    }
    vector<int>dist(n+1,-1);
    dist[s]=0;
    queue<int>q;
    q.push(s);
    while(!q.empty()){
        int u= q.front();
        q.pop();
        for(int v: adj[u]){
            if(dist[v]==-1){
                dist[v]=dist[u]+6;
                q.push(v);
            }
        }
    }
    vector<int>result;
    for(int i=1;i<=n;i++){
        if(i!=s){
            result.push_back(dist[i]);
        }
    }
    return result;
}

int main()
{
    ofstream fout(getenv("OUTPUT_PATH"));

    string q_temp;
    getline(cin, q_temp);

    int q = stoi(ltrim(rtrim(q_temp)));

    for (int q_itr = 0; q_itr < q; q_itr++) {
        string first_multiple_input_temp;
        getline(cin, first_multiple_input_temp);

        vector<string> first_multiple_input =
split(rtrim(first_multiple_input_temp));

        int n = stoi(first_multiple_input[0]);

        int m = stoi(first_multiple_input[1]);

        vector<vector<int>> edges(m);

        for (int i = 0; i < m; i++) {
```

```
            edges[i].resize(2);

            string edges_row_temp_temp;
            getline(cin, edges_row_temp_temp);

            vector<string> edges_row_temp =
split(rtrim(edges_row_temp_temp));

            for (int j = 0; j < 2; j++) {
                int edges_row_item = stoi(edges_row_temp[j]);

                edges[i][j] = edges_row_item;
            }
        }

        string s_temp;
        getline(cin, s_temp);

        int s = stoi(ltrim(rtrim(s_temp)));

        vector<int> result = bfs(n, m, edges, s);

        for (size_t i = 0; i < result.size(); i++) {
            fout << result[i];

            if (i != result.size() - 1) {
                fout << " ";
            }
        }

        fout << "\n";
    }

    fout.close();

    return 0;
}

string ltrim(const string &str) {
    string s(str);

    s.erase(
        s.begin(),
        find_if(s.begin(), s.end(), not1(ptr_fun<int, int>(isspace)))
    );

    return s;
}

string rtrim(const string &str) {
    string s(str);

    s.erase(
        find_if(s.rbegin(), s.rend(), not1(ptr_fun<int, int>
(isspace))).base(),
        s.end()
    );

    return s;
}

vector<string> split(const string &str) {
    vector<string> tokens;
```

```
    string::size_type start = 0;
    string::size_type end = 0;

    while ((end = str.find(" ", start)) != string::npos) {
        tokens.push_back(str.substr(start, end - start));

        start = end + 1;
    }

    tokens.push_back(str.substr(start));

    return tokens;
}
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0085 sec	8.63 KB
Testcase 2	Medium	Hidden case	Success	5	0.0089 sec	8.88 KB
Testcase 3	Medium	Hidden case	Success	5	0.024 sec	11 KB
Testcase 4	Hard	Hidden case	Success	15	0.0089 sec	8.5 KB
Testcase 5	Hard	Hidden case	Success	15	0.0096 sec	8.63 KB
Testcase 6	Hard	Hidden case	Success	30	0.1122 sec	18.8 KB
Testcase 7	Hard	Hidden case	Success	30	0.021 sec	9.13 KB
Testcase 8	Easy	Sample case	Success	0	0.0083 sec	8.5 KB

No Comments

QUESTION 2

Correct Answer

Score 60

Components in a graph › Coding

Algorithms | Data Structures | Disjoint Set | Core CS

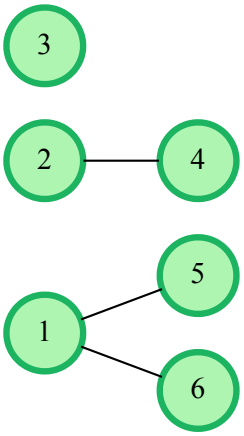
QUESTION DESCRIPTION

There are $2 \times N$ nodes in an undirected graph, and a number of edges connecting some nodes. In each edge, the first value will be between 1 and N, inclusive. The second node will be between $N + 1$ and $2 \times N$, inclusive. Given a list of edges, determine the size of the smallest and largest connected components that have 2 or more nodes. A node can have any number of connections. The highest node value will always be connected to at least 1 other node.

Note Single nodes should not be considered in the answer.

Example

$bg = [[1, 5], [1, 6], [2, 4]]$



The smaller component contains 2 nodes and the larger contains 3. Return the array $[2, 3]$.

Function Description

Complete the *connectedComponents* function in the editor below.

connectedComponents has the following parameter(s):
- *int bg[n][2]:* a 2-d array of integers that represent node ends of graph edges

Returns

- *int[2]:* an array with 2 integers, the smallest and largest component sizes

Input Format

The first line contains an integer n, the size of bg.
Each of the next n lines contain two space-separated integers, $bg[i][0]$ and $bg[i][1]$.

Constraints

- $1 \leq numberofnodesN \leq 15000$
- $1 \leq bg[i][0] \leq N$
- $N + 1 \leq bg[i][1] \leq 2N$

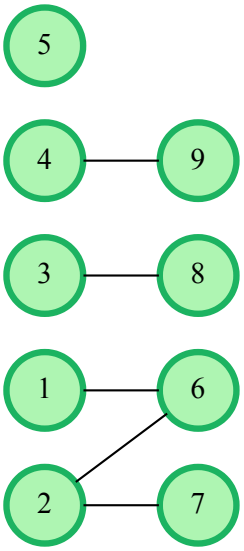
Sample Input

```
STDIN   Function
-----   --------
5       bg[] size n = 5
1 6     bg = [[1, 6],[2, 7], [3, 8], [4,9], [2, 6]]
2 7
3 8
4 9
2 6
```

Sample Output

```
2 4
```

Explanation



Since the component with node 5 contains only one node, it is not considered.

The number of vertices in the smallest connected component in the graph is 2 based on either $(3, 8)$ or $(4, 9)$.

The number of vertices in the largest connected component in the graph is 4 i.e. $1 - 2 - 6 - 7$.

CANDIDATE ANSWER

Language used: **C++14**

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

using namespace std;

string ltrim(const string &);
string rtrim(const string &);
vector<string> split(const string &);



/*
 * Complete the 'componentsInGraph' function below.
 *
 * The function is expected to return an INTEGER_ARRAY.
 * The function accepts 2D_INTEGER_ARRAY gb as parameter.
 */
struct DSU{
    vector<int>parent,size;
    DSU(int n){
        parent.resize(n+1);
        size.assign(n+1,1);
        for(int i=1;i<=n;i++)
            parent[i]=i;
    }
        int find(int x){
            if(parent[x]!=x) parent[x]=find(parent[x]);
            return parent[x];
        }
        void unite(int a,int b){
            a=find(a);
            b=find(b);
            if(a!=b){
```

```
                if(size[a]<size[b]) swap(a,b);
                parent[b]=a;
                size[a]+=size[b];

        }
    }
};


vector<int> componentsInGraph(vector<vector<int>> gb) {
    int maxNode=0;
    for(auto &e : gb){
        maxNode=max({maxNode,e[0],e[1]});
    }
    DSU dsu(maxNode);
    for(auto &e:gb){
        dsu.unite(e[0],e[1]);
    }
    int mn=INT_MAX,mx=INT_MIN;
    for(int i=1;i<=maxNode;i++){
        if(dsu.find(i)==i && dsu.size[i]>1){
            mn=min(mn, dsu.size[i]);
            mx=max(mx,dsu.size[i]);
        }
    }
    return {mn,mx};
}

int main()
{
    ofstream fout(getenv("OUTPUT_PATH"));

    string n_temp;
    getline(cin, n_temp);

    int n = stoi(ltrim(rtrim(n_temp)));

    vector<vector<int>> gb(n);

    for (int i = 0; i < n; i++) {
        gb[i].resize(2);

        string gb_row_temp_temp;
        getline(cin, gb_row_temp_temp);

        vector<string> gb_row_temp = split(rtrim(gb_row_temp_temp));

        for (int j = 0; j < 2; j++) {
            int gb_row_item = stoi(gb_row_temp[j]);

            gb[i][j] = gb_row_item;
        }
    }

    vector<int> result = componentsInGraph(gb);

    for (size_t i = 0; i < result.size(); i++) {
        fout << result[i];

        if (i != result.size() - 1) {
            fout << " ";
        }
    }
```

```
    fout << "\n";

    fout.close();

    return 0;
}

string ltrim(const string &str) {
    string s(str);

    s.erase(
        s.begin(),
        find_if(s.begin(), s.end(), not1(ptr_fun<int, int>(isspace)))
    );

    return s;
}

string rtrim(const string &str) {
    string s(str);

    s.erase(
        find_if(s.rbegin(), s.rend(), not1(ptr_fun<int, int>
(isspace))).base(),
        s.end()
    );

    return s;
}

vector<string> split(const string &str) {
    vector<string> tokens;

    string::size_type start = 0;
    string::size_type end = 0;

    while ((end = str.find(" ", start)) != string::npos) {
        tokens.push_back(str.substr(start, end - start));

        start = end + 1;
    }

    tokens.push_back(str.substr(start));

    return tokens;
}
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Medium	Hidden case	Success	0	0.0085 sec	8.75 KB
Testcase 2	Medium	Hidden case	Success	0	0.0078 sec	8.63 KB
Testcase 3	Medium	Hidden case	Success	0	0.0113 sec	8.63 KB
Testcase 4	Medium	Hidden case	Success	0	0.0101 sec	8.88 KB
Testcase 5	Medium	Hidden case	Success	0	0.0091 sec	8.63 KB
Testcase 6	Medium	Hidden case	Success	0	0.0102 sec	8.75 KB
Testcase 7	Medium	Hidden case	Success	0	0.0143 sec	9 KB
Testcase 8	Medium	Hidden case	Success	0	0.0135 sec	9.13 KB

Testcase 9	Medium	Hidden case	Success	0	0.01 sec	9.13 KB
Testcase 10	Medium	Hidden case	Success	0	0.0114 sec	9.13 KB
Testcase 11	Medium	Hidden case	Success	0	0.0121 sec	9.13 KB
Testcase 12	Medium	Hidden case	Success	0	0.0223 sec	8.81 KB
Testcase 13	Medium	Hidden case	Success	0	0.0116 sec	8.92 KB
Testcase 14	Medium	Hidden case	Success	0	0.0114 sec	9 KB
Testcase 15	Medium	Hidden case	Success	0	0.0131 sec	9 KB
Testcase 16	Medium	Hidden case	Success	0	0.0152 sec	9.53 KB
Testcase 17	Medium	Hidden case	Success	0	0.0088 sec	8.63 KB
Testcase 18	Medium	Hidden case	Success	0	0.0231 sec	9.52 KB
Testcase 19	Easy	Sample case	Success	0	0.0084 sec	8.63 KB
Testcase 20	Medium	Hidden case	Success	0	0.0163 sec	9.76 KB
Testcase 21	Medium	Hidden case	Success	0	0.0166 sec	9.88 KB
Testcase 22	Medium	Hidden case	Success	0	0.0219 sec	9.88 KB
Testcase 23	Medium	Hidden case	Success	0	0.0199 sec	9.75 KB
Testcase 24	Medium	Hidden case	Success	0	0.0176 sec	9.85 KB
Testcase 25	Medium	Hidden case	Success	0	0.0208 sec	9.75 KB
Testcase 26	Medium	Hidden case	Success	0	0.0167 sec	9.88 KB
Testcase 27	Medium	Hidden case	Success	0	0.0226 sec	10 KB
Testcase 28	Medium	Hidden case	Success	0	0.0166 sec	9.75 KB
Testcase 29	Medium	Hidden case	Success	0	0.0228 sec	9.8 KB
Testcase 30	Medium	Hidden case	Success	0	0.0162 sec	9.5 KB
Testcase 31	Medium	Hidden case	Success	0	0.0252 sec	9.75 KB
Testcase 32	Medium	Hidden case	Success	0	0.0289 sec	9.88 KB
Testcase 33	Medium	Hidden case	Success	0	0.0161 sec	9.75 KB
Testcase 34	Hard	Hidden case	Success	10	0.0175 sec	9.88 KB
Testcase 35	Hard	Hidden case	Success	10	0.031 sec	9.54 KB
Testcase 36	Hard	Hidden case	Success	10	0.018 sec	9.63 KB
Testcase 37	Hard	Hidden case	Success	10	0.018 sec	9.68 KB
Testcase 38	Hard	Hidden case	Success	10	0.015 sec	9.75 KB
Testcase 39	Hard	Hidden case	Success	10	0.0164 sec	9.75 KB

No Comments

QUESTION 3

Correct Answer

Score 95

Cut the Tree › Coding

Search | Algorithms | Medium | problem-solving | Core CS

QUESTION DESCRIPTION

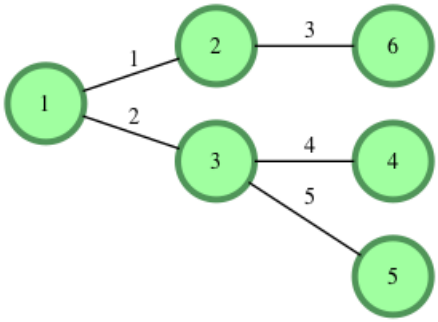
There is an undirected tree where each vertex is numbered from 1 to n, and each contains a data value. The *sum* of a tree is the sum of all its nodes' data values. If an edge is cut, two smaller trees are formed. The *difference* between two trees is the absolute value of the difference in their sums.

Given a tree, determine which edge to cut so that the resulting trees have a minimal *difference* between them, then return that difference.

Example

$data = [1, 2, 3, 4, 5, 6]$
$edges = [(1, 2), (1, 3), (2, 6), (3, 4), (3, 5)]$

In this case, node numbers match their weights for convenience. The graph is shown below.



The values are calculated as follows:

```
Edge    Tree 1  Tree 2  Absolute
Cut     Sum      Sum     Difference
1        8         13         5
2        9         12         3
3        6         15         9
4        4         17        13
5        5         16        11
```

The minimum absolute difference is 3.

Note: The given tree is *always* rooted at vertex 1.

Function Description

Complete the *cutTheTree* function in the editor below.

cutTheTree has the following parameter(s):

- *int data[n]:* an array of integers that represent node values
- *int edges[n-1][2]:* an 2 dimensional array of integer pairs where each pair represents nodes connected by the edge

Returns

- *int:* the minimum achievable absolute difference of tree sums

Input Format

The first line contains an integer n, the number of vertices in the tree.
The second line contains n space-separated integers, where each integer u denotes the $node[u]$ data value, $data[u]$.
Each of the $n - 1$ subsequent lines contains two space-separated integers u and v that describe edge $u \leftrightarrow v$ in tree t.

Constraints

- $3 \leq n \leq 10^5$
- $1 \leq data[u] \leq 1001$, where $1 \leq u \leq n$.

Sample Input

```
STDIN                       Function
-----                       --------
6                           data[] size n = 6
100 200 100 500 100 600     data = [100, 200, 100, 500, 100, 600]
1 2                         edges = [[1, 2], [2, 3], [2, 5], [4, 5], [5,
6]]
2 3
2 5
```

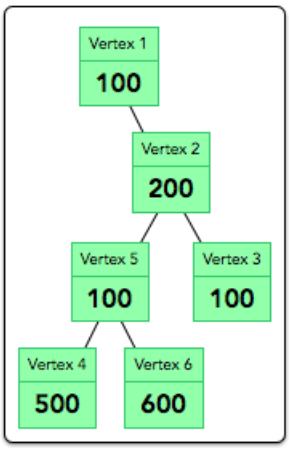
```
4 5
5 6
```

Sample Output

```
400
```

Explanation

We can visualize the initial, uncut tree as:



There are $n - 1 = 5$ edges we can cut:

1. Edge $1 \leftrightarrow 2$ results in $d_{1 \leftrightarrow 2} = 1500 - 100 = 1400$
2. Edge $2 \leftrightarrow 3$ results in $d_{2 \leftrightarrow 3} = 1500 - 100 = 1400$
3. Edge $2 \leftrightarrow 5$ results in $d_{2 \leftrightarrow 5} = 1200 - 400 = 800$
4. Edge $4 \leftrightarrow 5$ results in $d_{4 \leftrightarrow 5} = 1100 - 500 = 600$
5. Edge $5 \leftrightarrow 6$ results in $d_{5 \leftrightarrow 6} = 1000 - 600 = 400$

The minimum *difference* is 400.

CANDIDATE ANSWER

Language used: **C++14**

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

using namespace std;

string ltrim(const string &);
string rtrim(const string &);
vector<string> split(const string &);



/*
 * Complete the 'cutTheTree' function below.
 *
 * The function is expected to return an INTEGER.
 * The function accepts following parameters:
 *  1. INTEGER_ARRAY data
 *  2. 2D_INTEGER_ARRAY edges
 */
 int n;
 vector<int>values;
 vector<vector<int>>adj;
 vector<int>subtreeSum;
 int totalSum;
```

```
int dfs(int u,int parent){
    int sum=values[u];
    for(int v : adj[u]){
        if(v!=parent){
            sum+=dfs(v,u);
        }
    }
    subtreeSum[u]=sum;
    return sum;
}

int cutTheTree(vector<int> data, vector<vector<int>> edges) {
    n=data.size();
    values=data;
    adj.assign(n,{});
    subtreeSum.assign(n,0);
    for(auto &e: edges){
        int u=e[0]-1;
        int v=e[1]-1;
        adj[u].push_back(v);
        adj[v].push_back(u);
    }
    totalSum=dfs(0,-1);
    int ans=INT_MAX;
    for(int i=1;i<n;i++){
        int part1=subtreeSum[i];
        int part2=totalSum-part1;
        ans=min(ans,abs(part1-part2));
    }
    return ans;
}

int main()
{
    ofstream fout(getenv("OUTPUT_PATH"));

    string n_temp;
    getline(cin, n_temp);

    int n = stoi(ltrim(rtrim(n_temp)));

    string data_temp_temp;
    getline(cin, data_temp_temp);

    vector<string> data_temp = split(rtrim(data_temp_temp));

    vector<int> data(n);

    for (int i = 0; i < n; i++) {
        int data_item = stoi(data_temp[i]);

        data[i] = data_item;
    }

    vector<vector<int>> edges(n - 1);

    for (int i = 0; i < n - 1; i++) {
        edges[i].resize(2);

        string edges_row_temp_temp;
        getline(cin, edges_row_temp_temp);

        vector<string> edges_row_temp = split(rtrim(edges_row_temp_temp));
```

```
        for (int j = 0; j < 2; j++) {
            int edges_row_item = stoi(edges_row_temp[j]);

            edges[i][j] = edges_row_item;
        }
    }

    int result = cutTheTree(data, edges);

    fout << result << "\n";

    fout.close();

    return 0;
}

string ltrim(const string &str) {
    string s(str);

    s.erase(
        s.begin(),
        find_if(s.begin(), s.end(), not1(ptr_fun<int, int>(isspace)))
    );

    return s;
}

string rtrim(const string &str) {
    string s(str);

    s.erase(
        find_if(s.rbegin(), s.rend(), not1(ptr_fun<int, int>
(isspace))).base(),
        s.end()
    );

    return s;
}

vector<string> split(const string &str) {
    vector<string> tokens;

    string::size_type start = 0;
    string::size_type end = 0;

    while ((end = str.find(" ", start)) != string::npos) {
        tokens.push_back(str.substr(start, end - start));

        start = end + 1;
    }

    tokens.push_back(str.substr(start));

    return tokens;
}
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0093 sec	8.75 KB
Testcase 2	Hard	Hidden case	Success	5	0.008 sec	8.75 KB

Testcase 3	Hard	Hidden case	Success	5	0.0105 sec	8.63 KB
Testcase 4	Hard	Hidden case	Success	5	0.0149 sec	8.38 KB
Testcase 5	Easy	Sample case	Success	0	0.0136 sec	8.63 KB
Testcase 6	Hard	Hidden case	Success	5	0.0156 sec	10.6 KB
Testcase 7	Hard	Hidden case	Success	10	0.1053 sec	30.3 KB
Testcase 8	Hard	Hidden case	Success	5	0.0871 sec	31 KB
Testcase 9	Hard	Hidden case	Success	5	0.1447 sec	30.4 KB
Testcase 10	Hard	Hidden case	Success	5	0.1198 sec	30.8 KB
Testcase 11	Hard	Hidden case	Success	5	0.1622 sec	30.8 KB
Testcase 12	Hard	Hidden case	Success	5	0.0909 sec	29.9 KB
Testcase 13	Medium	Hidden case	Success	5	0.0966 sec	30.1 KB
Testcase 14	Medium	Hidden case	Success	5	0.1016 sec	30.7 KB
Testcase 15	Medium	Hidden case	Success	5	0.1009 sec	30 KB
Testcase 16	Medium	Hidden case	Success	5	0.1375 sec	30.8 KB
Testcase 17	Medium	Hidden case	Success	5	0.0991 sec	30.9 KB
Testcase 18	Medium	Hidden case	Success	5	0.1297 sec	30.8 KB
Testcase 19	Medium	Hidden case	Success	5	0.0975 sec	29.9 KB
Testcase 20	Medium	Hidden case	Success	5	0.0915 sec	30.1 KB

No Comments

PDF generated at: 23 Aug 2025 17:35:07 UTC