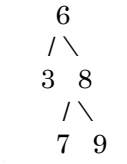
Elements in Range in C++

```
#include <iostream>
using namespace std;
class ElementsinRange
{
public:
   struct Node
   {
      int key;
      Node *left;
      Node *right;

      Node(int item)
      {
         key = item;
         left = nullptr;
         right = nullptr;
      }
   };

   static void elementsInRangeK1K2(Node *root, int
k1, int k2)
   {
      if (root == nullptr)
      {
         return;
      }

      if (root->key >= k1 && root->key <= k2)
      {
         cout << root->key << " ";
      }

      if (root->key > k1)
      {
         elementsInRangeK1K2(root->left, k1, k2);
      }

      if (root->key < k2)
      {
         elementsInRangeK1K2(root->right, k1, k2);
      }
   }
};

int main()
{
   ElementsinRange::Node *root = new
ElementsinRange::Node(6);
   root->left = new ElementsinRange::Node(3);
   root->right = new ElementsinRange::Node(8);
   root->right->left = new ElementsinRange::Node(7);
   root->right->right = new
ElementsinRange::Node(9);

   cout << "Elements in range [5, 8]: ";
   ElementsinRange::elementsInRangeK1K2(root, 5,
8);
   cout << endl;
   return 0;
}
```

BST Structure:



🔍 Traversal Logic:

The function recursively traverses only relevant subtrees:

- If root->key >= k1, check left subtree.
- If root->key <= k2, check right subtree.
- If key is within range, print it.

📄 Dry Run Table:

Function Call	root->key	Action Taken	Output
elementsInRangeK1K2(6, 5, 8)	6	In range → print 6, go left and right	6
├─ elementsInRangeK1K2(3, 5, 8)	3	Not in range, go right skipped	-
└─ elementsInRangeK1K2(8, 5, 8)	8	In range → print 8, go left	8
└─ elementsInRangeK1K2(7, 5, 8)	7	In range → print 7	7

🖨 Final Output:

Elements in range [5, 8]: 6 8 7

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