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Q1

```
#include <iostream>
using namespace std;
inline float calculatePerimeter(float length, float width) {
return 2 * (length + width);
}
inline float calculateArea(float length, float width) {
return length * width;
}
int main() {
float length, width;
cout << "Enter length of the rectangle: ";
cin >> length;
cout << "Enter width of the rectangle: ";
cin >> width;
cout << "Perimeter of the rectangle: " << calculatePerimeter(length,
width) << endl;
cout << "Area of the rectangle: " << calculateArea(length, width) << endl;
return 0;
}
```

Q2write a c++ program to create a class which contains single dimensional

```
#include <iostream>
#include <algorithm>
using namespace std;
class ArrayWithMedian {
private:
int* arr;
int size;
public:
ArrayWithMedian(int n) {
```

```
size = n;
arr = new int[size];
for (int i = 0; i < size; ++i) {
cout << "Enter element " << i + 1 << ": ";
cin >> arr[i];
}
}
double calculateMedian() {
sort(arr, arr + size);
if (size % 2 == 1) {
return arr[size / 2];
}
else {
int mid1 = size / 2 - 1;
int mid2 = size / 2;
return (arr[mid1] + arr[mid2]) / 2.0;
}
}
~ArrayWithMedian() {
delete[] arr;
}
};
int main() {
int n;
cout << "Enter the size of the array: ";
cin >> n;
ArrayWithMedian myArray(n);
cout << "Median of the array: " << myArray.calculateMedian() << endl;
return 0;
}
```