

```
1 // Vector3D_PS1.cpp
2 // Created by NUR E SIAM
3
4 #include "Vector3D.h"
5 #include <sstream>
6
7 std::string Vector3D::toString() const noexcept {
8     // Create a stringstream to build the output string
9     std::stringstream stream;
10
11     // Format x, y, and w components with 4 decimal places and add to the stream
12     stream << "[" << std::round(x() * 10000.0f) / 10000.0f << ", "
13         << std::round(y() * 10000.0f) / 10000.0f << ", "
14         << std::round(w() * 10000.0f) / 10000.0f << "];"
15
16     // Extract the formatted string from the stringstream
17     std::string output = stream.str();
18
19     // Return the formatted string representation of the vector
20     return output;
21 }
22
```