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for (int i = 0; i < m_numShapeVertices; i++)
{
    if (i >= 0 && i < slices) //Orders top faces
    {
        if (i == slices - 1)
        {
            vIndex[(currentFace * 3) + 0] = 0;
            vIndex[(currentFace * 3) + 1] = i;
            vIndex[(currentFace * 3) + 2] = m_numShapeVertices - 2;

            cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
<< "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
<< endl;

            currentFace++;
        }
        else
        {
            vIndex[(currentFace * 3) + 0] = i + 1;
            vIndex[(currentFace * 3) + 1] = i;
            vIndex[(currentFace * 3) + 2] = m_numShapeVertices - 2;

            cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
<< "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
<< endl;

            currentFace++;
        }
    }

    else if (i >= stacks && i < m_numShapeVertices - 2) //Orders mid faces
    {
        if (currentSlice == slices - 1) //Last vertex in slice
        {
            vIndex[(currentFace * 3) + 0] = i;
            vIndex[(currentFace * 3) + 1] = i - (slices);
            vIndex[(currentFace * 3) + 2] = i - (slices + (slices - 1));

            cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
<< "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
<< endl;

            currentFace++;

            vIndex[(currentFace * 3) + 0] = i;
            vIndex[(currentFace * 3) + 1] = i - 1;
            vIndex[(currentFace * 3) + 2] = i - slices;

            cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
<< "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
<< endl;

            currentFace++;
        }
    }
}

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        currentSlice = 0;
    }
    else if (currentSlice == 0) //First vertex in slice
    {
        vIndex[(currentFace * 3) + 0] = i;
        vIndex[(currentFace * 3) + 1] = i - (slices);
        vIndex[(currentFace * 3) + 2] = i - (slices - 1);

        cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
        << "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
        << endl;

        currentFace++;

        vIndex[(currentFace * 3) + 0] = i;
        vIndex[(currentFace * 3) + 1] = i + (slices - 1);
        vIndex[(currentFace * 3) + 2] = i - slices;

        cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
        << "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
        << endl;

        currentFace++;

        currentSlice++;
    }
    else //Vertex Between slices
    {
        vIndex[(currentFace * 3) + 0] = i;
        vIndex[(currentFace * 3) + 1] = i - (slices);
        vIndex[(currentFace * 3) + 2] = i - (slices - 1);

        cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
        << "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
        << endl;

        currentFace++;

        vIndex[(currentFace * 3) + 0] = i;
        vIndex[(currentFace * 3) + 1] = i - 1;
        vIndex[(currentFace * 3) + 2] = i - slices;

        cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3) + 0]
        << "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] << ">"
        << endl;

        currentFace++;

        currentSlice++;
    }
}

else //Orders bottom faces
{
    for (int j = (m_numShapevertices-1) - (slices + 1); j < m_numShapevertices
- 2; j++)
    {

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        if (j < m_numShapeVertices - 3)
        {
            vIndex[(currentFace * 3) + 0] = m_numShapeVertices - 1;
            vIndex[(currentFace * 3) + 1] = j;
            vIndex[(currentFace * 3) + 2] = j+1;

            cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3)
+ 0] << "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] <<
">" << endl;

            currentFace++;
        }
        else
        {
            vIndex[(currentFace * 3) + 0] = m_numShapeVertices - 1;
            vIndex[(currentFace * 3) + 1] = j;
            vIndex[(currentFace * 3) + 2] = j- (slices - 1);

            cout << "Face " << currentFace << " <" << vIndex[(currentFace * 3)
+ 0] << "," << vIndex[(currentFace * 3) + 1] << "," << vIndex[(currentFace * 3) + 2] <<
">" << endl;

            currentFace++;
        }
    }
    i = m_numShapeVertices;
}
//phi2  phi1
// |      |
// 2-----1 -- theta1
// | \    |
// |  \   |
// 3-----4 -- theta2
}

```