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I used the following techniques to get the output shown below:

1. For loading the vertices from the binary file into the vertex buffer
 - For reading the binary file, I used the help from lab 7
 - Read the first integer value from the file into a variable i.e. which stores the number of patches
 - Created an array of floats of size equal to the value read in the previous step times 16 (number of vertices in each patch) times 3 (coordinates of each vertex)
 - Read and stored the remaining elements of the binary file into this array
 - Passed the total number of points to vertexBuffer.
2. For drawing the patches, I used the following code:

```
glPatchParameteri (GL_PATCH_VERTICES, 16);  
glDrawArrays (GL_PATCHES, 0, num_Patches * 16 * 3);
```

3. In tessellation Control Shader, I assigned different colors to different patches using if else statements with the condition statements as "**gl_PrimitiveID**".
4. In Tessellation Evaluation Shader, the Bezier surface formula is implemented by using the 16 control points and the U and V matrices and multiplying them accordingly.
5. The normals were computed using the cross product of the differentials of Bezier formula with respect to u and v, as suggested in the assignment outline.
6. The normal were mapped to view space using the code from lab 2.

The output is on the next page.

Output:

