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ME 557 Homework 4

Problem 1

Actually I blend the original gradient color with my texture:

color = 0.2*pass_Color+0.8*texture(tiger, pass_texcoord);

”tiger” is the uniform sampler2D object I passed to the shadow program.

The texture coordinate is set as below:

```
glBindBuffer(GL_ARRAY_BUFFER, vboID[0]); // Bind our Vertex Buffer Object
	glBufferData(GL_ARRAY_BUFFER, 30 * sizeof(GLfloat), vertices,
GL_STATIC_DRAW);

GLint texAttrib = glGetAttribLocation(program, "in_texcoord");
	glEnableVertexAttribArray(texAttrib);
	glVertexAttribPointer(texAttrib, 2, GL_FLOAT, GL_TRUE, 5 *
sizeof(GLfloat),(const GLvoid*)(3 * sizeof(GLfloat)));
```

Problem 2

Here are the three raw pictures I used in the question.

Landscape.bmp	colorGradient.bmp	Cat.bmp
		

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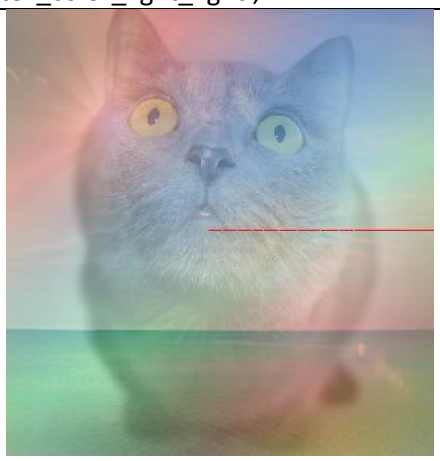
I modified **multi_texture.fs** to include the third texture color into blending operation.

The three texture color vector names are **tex_color**, **tex_color_light**, **tex_color_light_light** respectively.

Two blending method results are shown below:

color = tex_color * tex_color_light*tex_color_light_light;	color = 0.1 * pass_Color + 0.3*tex_color + 0.3*tex_color_light+ 0.3*tex_color_light_light ;
	

The main problem I think is to understand your example code first so that I can do my work based on your code. Actually I spend longer time on question 1 since I need to modify the shadow code, which is hard to find the mistakes.