

# Mini Project

Title :- Boat Animation

Adding a sound :-

s/w used :- irrklang (libraries)

Irrklang library is a high level 2D & 3D cross platform sound engine & audio library which plays - wav, mp3, ogg, c, flac, mod & many more file formats & is usable in C++ & all HET languages. It has all the features known from from low level language as well as low or sophisticated features like streaming engine, extendible audio reading, single & multi threading, mock, 3D audio emulation for low end hardware a plugin system, multiple roll off models & more.

Example in C++

```
#include <iostream>
#include <irrklang.h>
using namespace s. irrklang;

int main() {
    IrrSoundEngine * engine = create Irrklang Device();
    if (!engine)
        return 0; // error starting the engine.
    engine->play2D("xyz.mp3", true); // play some sound
    char i = 0;
    cin >> i; // wait for users to drop some key
    engine->drop(); // delete engine
    return 0;
}
```



## 2] Adding Iceberg

Following is the function to draw an iceberg.

```
void ice() {
    glPushMatrix();
    glTranslated(800, 50, 0, 0);
    glScaled(20, 10, 0);
    glBegin(GL_POLYGON);
    glVertex2f(5.5, 2.5);
    glVertex2f(12.8, 19.5);
    glVertex2f(15, 19.5);
    glVertex2f(12.5, 19.5);
    glVertex2f(13.5, 18.5);
    glVertex2f(16.5, 20.5);
    glVertex2f(17.5, 18.5);
    glVertex2f(18.5, 3.5);
    glVertex2f(19, 3);
    glEnd();
    glPopMatrix();
}
```

## 3] Adding Lightening

```
void light()
{
```

~~gl float~~

gl float mat\_ambient[] = {1.0f, 1.0f, 1.0f, 1.0f};

gl float mat\_diffuse[] = {1.0f, 1.0f, 1.0f, 1.0f};

gl float mat\_specular[] = {1.0f, 1.0f, 1.0f, 1.0f};

gl ~~float~~ mat\_shininess[] = {50.0f};

gl material PVC GL\_Front, GL\_Specular, mat\_specular

gl material PVC GL\_Front, GL\_Ambient, mat\_ambient

gl material PVC GL\_Front, GL\_Diffuse, mat\_diffuse

gl material PVC GL\_Front, GL\_Shininess, mat\_shininess

}