

```

marbel(other) {

  @ for (let v of this.vertices) [fj

let c = other.center;

let r = other.r;

let p = v.copy();

p.sub(c);

let m = p.mag();

let root = sqrt(1 + (r * r) / (mx m));

p-mult( root);

p.add(c);

v.set(p);

```

```

function createGroundMesh() {

// adding object: ground

const groundGeo = new THREE.BoxGeometry(2@, 20, 0.5);

const groundMat = new THREE.MeshStandardMaterial({

color: '#031D02',

side: THREE.DoubleSide,

wireframe: false

1);

const groundMesh = new THREE.Mesh(groundGeo, groundMat) ;

groundMesh.name = 'ground';

groundMesh. receiveShadow = true;

scene.add(groundMesh) ;

return groundMesh;

from langchain_openai import ChatOpenAI

```

```
from langchain_community.llms import Ollama
```

```
from langchain_core.output_parsers import StrOutputParser
```

```
from langchain_community.document_loaders import PyPDFLoader
```

```
from fpdf import FPDF
```

```
import os
```

```
from PIL import Image
```

```
import pytesseract
```

```
pdf = FPDF()
```

```
pdf.add_page()
```

```
pdf.set_font("helvetica", size = 12)
```

```
with open('sample.txt', 'r') as file:
```

```
    for line in file:
```

```
        pdf.cell(200, 10, txt = line, ln = True, align = 'L')
```

```
# Save the PDF with name .pdf
```

```
pdf_output = 'sample.pdf'
```

```
pdf.output(pdf_output)
```

```
marbel(other) {
```

```
    @ for (let v of this.vertices) [fj
```

```
    let c = other.center;
```

```
    let r = other.r;
```

```
    let p = v.copy();
```

```
p.sub(c);

let m = p.mag();

let root = sqrt(1 + (r * r) / (mx m));

p-mult( root);

p.add(c);

v.set(p);
```

```
function createGroundMesh() {

// adding object: ground

const groundGeo = new THREE.BoxGeometry(20, 20, 0.5);

const groundMat = new THREE.MeshStandardMaterial({

color: '#031D02',

side: THREE.DoubleSide,

wireframe: false

1);

const groundMesh = new THREE.Mesh(groundGeo, groundMat) ;

groundMesh.name = 'ground';

groundMesh.receiveShadow = true;

scene.add(groundMesh) ;

return groundMesh;

from langchain_openai import ChatOpenAI

from langchain_community.llms import Ollama

from langchain_core.output_parsers import StrOutputParser

from langchain_community.document_loaders import PyPDFLoader
```

```
from fpdf import FPDF
```

```
import os
```

```
from PIL import Image
```

```
import pytesseract
```

```
pdf = FPDF([])
```

```
pdf.add_page()
```

```
pdf.set_font("helvetica", size = 12)
```

```
with open('sample.txt', 'r') as file:
```

```
for line in file:
```

```
pdf.cell(200, 10, txt = line, ln = True, align = 'L')
```

```
# Save the PDF with name .pdf
```

```
pdf_output = 'sample.pdf'
```

```
pdf.output(pdf_output)
```

```
marbel(other) {
```

```
@ for (let v of this.vertices) [fj
```

```
let c = other.center;
```

```
let r = other.r;
```

```
let p = v.copy();
```

```
p.sub(c);
```

```
let m = p.mag();
```

```
let root = sqrt(1 + (r * r) / (m * m));
```

```
p-mult( root);
```

```
p.add(c);
```

```
v.set(p);
```

```
function createGroundMesh() {
```

```
// adding object: ground
```

```
const groundGeo = new THREE.BoxGeometry(20, 20, 0.5);
```

```
const groundMat = new THREE.MeshStandardMaterial({
```

```
color: '#031D02',
```

```
side: THREE.DoubleSide,
```

```
wireframe: false
```

```
1);
```

```
const groundMesh = new THREE.Mesh(groundGeo, groundMat) ;
```

```
groundMesh.name = 'ground';
```

```
groundMesh.receiveShadow = true;
```

```
scene.add(groundMesh) ;
```

```
return groundMesh;
```

```
from langchain_openai import ChatOpenAI
```

```
from langchain_community.llms import Ollama
```

```
from langchain_core.output_parsers import StrOutputParser
```

```
from langchain_community.document_loaders import PyPDFLoader
```

```
from fpdf import FPDF
```

```
import os
```

```
from PIL import Image
```

```
import pytesseract
```

```

pdf = FPDF([]]
pdf.add_page()
pdf.set_font("helvetica", size = 12)
with open('sample.txt', 'r') as file:
    for line in file:

pdf.cell(200, 10, txt = line, ln = True, align = 'L')

# Save the PDF with name .pdf
pdf_output = 'sample.pdf'
pdf.output(pdf_output)

```

```

marbel(other) {
    @ for (let v of this.vertices) [fj
    let c = other.center;
    let r = other.r;
    let p = v.copy();
    p.sub(c);
    let m = p.mag();
    let root = sqrt(1 + (r * r) / (m * m));
    p.mult( root);
    p.add(c);
    v.set(p);

```

```

function createGroundMesh() {
    // adding object: ground
    const groundGeo = new THREE.BoxGeometry(20, 20, 0.5);

```

```
const groundMat = new THREE.MeshStandardMaterial({  
  color: '#031D02',  
  side: THREE.DoubleSide,  
  wireframe: false  
1});  
  
const groundMesh = new THREE.Mesh(groundGeo, groundMat) ;  
  
groundMesh.name = 'ground';  
  
groundMesh.receiveShadow = true;  
  
scene.add(groundMesh) ;  
  
return groundMesh;  
  
from langchain_openai import ChatOpenAI  
  
  
from langchain_community.llms import Ollama  
  
  
from langchain_core.output_parsers import StrOutputParser  
  
from langchain_community.document_loaders import PyPDFLoader  
  
from fpdf import FPDF  
  
  
import os  
  
from PIL import Image  
  
import pytesseract  
  
pdf = FPDF()  
  
pdf.add_page()  
  
pdf.set_font("helvetica", size = 12)  
  
with open('sample.txt', 'r') as file:  
  
for line in file:
```

```
pdf.cell(200, 10, txt = line, ln = True, align = 'L')
```

```
# Save the PDF with name .pdf
```

```
pdf_output = ?sample.pdf'
```

```
pdf. output (pdf_output)
```