

Experiment Report

Name: SRIKAR SRIKAR T

Section: W

Experiment Type: Projectile Motion

Input Value: 2

Experiment Code:

```
import numpy as np
import matplotlib.pyplot as plt

def simulate_projectile(v0):
    g = 9.81
    t_max = (2 * v0) / g
    t = np.linspace(0, t_max, 100)
    x = v0 * t
    y = v0 * t - 0.5 * g * t**2
    plt.plot(x, y)
    plt.xlabel("Distance (m)")
    plt.ylabel("Height (m)")
    plt.title("Projectile Motion")
    plt.grid(True)
    plt.show()
```

Projectile Motion

