The Free Particle and the Particle in the Box

Description
This project explores the wave functions of two model systems: the free particle and the particle in a box. Through detailed explanations and interactive plots, the notebook delves into the quantum mechanical behaviors and mathematical formulations for these foundational concepts in quantum physics.

Installation
To run this notebook, you will need to install Python and the following dependencies:
```bash
pip install numpy matplotlib ipywidgets
```

Usage
To view and interact with the notebook:
1. Clone this repository.
2. Navigate to the repository directory.
3. Start Jupyter Notebook or JupyterLab:
   ```bash
   jupyter notebook
   ```
4. Open the `UE02.ipynb` file.

Data
No external datasets are required for this notebook as the primary focus is on theoretical calculations and visual simulations.

Contributing
Contributions are welcome! If you have suggestions or improvements, please fork the repository and submit a pull request.

License

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Acknowledgments

- Thanks to everyone who has contributed to the understanding and teaching of quantum mechanics.