**Team Member List:**

1. Karen Sanchez

2. Maksim Kosminskii

3. Davis Porath

**Description**

This project was created by Davis Porath for MIS 691 Final project. It is a simplified mortgage calculator that allows users to easily receive California county recommendations for homes they can afford based on their financial data.

**Installation**

1. Download the “2023 Median House Prices by County US AND CA.xlsx” file

Data Source: National Association of Realtors

1. Download the “Main Code.py” file.
2. Navigate to ln 4 of the Main Code.py file and set the file\_path to where the “2023 Median House Prices by County US AND CA.xlsx” file from step 1 is located. See example below:



1. Code is ready to run

**Inputs**

This project takes in the following inputs:

* File: 2023 Median House Prices by County US AND CA.xlsx
* Library: Pandas
* User input: Credit Score, Downpayment, Yearly Gross Income, Repeat Code? (Yes/No)

**Outputs**

This project generates the following outputs:

“The bank might give you around $772000, but you will have to beg.”

* $772000, is a loan amount that a user can qualify for when applying for a mortgage. The amount is based on the user input of Credit Score, Yearly Gross Income, and Downpayment.

“You can probably, maybe, potentially afford something in Placer County, CA.”

* The code recommends a county in California with house prices around the loan amount a user qualifies for.

“The median price of the house is around $740068 in that county. Hopefully the crime is low around there.”

* The code shows an average house price in the county suggested on the previous output line.

**Main Code File**

The main code file for this project is “Main code.py”. This contains the core logic and orchestrates the other modules.

**Running the Code**

To run this project, clone the repo and navigate to the directory in your terminal. Update the file\_path variable to the excel house price file (2023 Median House Prices by County US AND CA.xlsx), then run the following:

python Main code.py

Refer to Inputs and Outputs section above for details on command line arguments and generated files.

**Deployment**

This application is deployed on github.

The shareable link is: <https://github.com/davisporath/MIS-691-Project---Mortgage-Calculator.git>

**License**

This project is licensed under the MKD License.

Data related to county home prices was sourced from publicly available records maintained by the National Association of Realtors.

Interest Rate data was sourced from publicly available records maintained by FICO.

**Contact**

For any questions, issues running the code, or suggested improvements, please contact Davis Porath at [dporath6517@sdsu.edu](mailto:dporath6517@sdsu.edu).