**Program Description**: This program is designed to scrape data off the chosen website, which is the Wikipedia page on the Swedish Monarchs. The program is going to scrape all the Monarchs’ down and then be reformatted into a json file. Then the json file needs to be transferred into a python usable variable. The best choice would be a dictionary. Which would then be used for the tree, the data that is scraped will be used to define which Monarchs are their ancestor, parent, or child through the usage of tree’s and by traversing through this tree we can find out who is the ancestor of all monarch’s and who their child is, so on and so forth.

The data structures used. The two main data structures used are Trees and Dictionaries. The dictionary implemented structure is {Name : “”, Marriage : ””, Children : [{Name: “” : Marriage : “”, Children[etc]},etc]}. This has a name, marriage, and children connected to each level. Each child can also have a name marriage and child and so on.

We made a node.py and made a tree structure which uses node. This tree structure is a general tree. It can have as many children as it wants to. The way the tree is set up is to have a name and an infinite number of children stored in an array. The tree can be displayed to show the children and marriage relations of the people of the royal family. The node which is used by the tree class is a simple node class which has getters and setters for both data and the next value.

The scrape file was able to take the html and scrape out the data for the royal families’ names and marriage. It then updated it into a json. After that we can use a function dump which turns a json file into a usable python variable. After we use dump we get a python dictionary with all the members of the royal family.