Getting Started with JTable

Task 1:

1. **Implement a simple Table on a Frame that**
   - **Adds pre-defined column header**
   - **Adds one row of pre-defined data**
   - **Deletes all existing rows**
   - **Search ID No.**
     - **Matching ID – prompts a message with ID and Name**
     - **Else, "ID not found"**
   - **Delete the row only when it's selected**

Code support:

```
public void showData(){
    // cast the Table model to DefaultTable Model
    DefaultTableModel model = (DefaultTableModel) MyTable.getModel();
    // remove existing rows
  for (int i = 0; i< model.getRowCount();i++){
      model.removeRow(0);
  }
  // Two Collection classes (Vector) created for header and body
    Vector <String> header = new Vector <String>();

    Vector <String> dataset1 = new Vector <String>();

    header.add("ID_No"); header.add("NAME");header.add("DEPT");header.add("SALARY");

    dataset1.add("001");dataset1.add("Tom");dataset1.add("ICT");dataset1.add("3000");

    Vector data = new Vector();
    data.add(dataset1);

    model.setDataVector(data, header);
    MyTable.setModel(model);

}
```

Task 2:

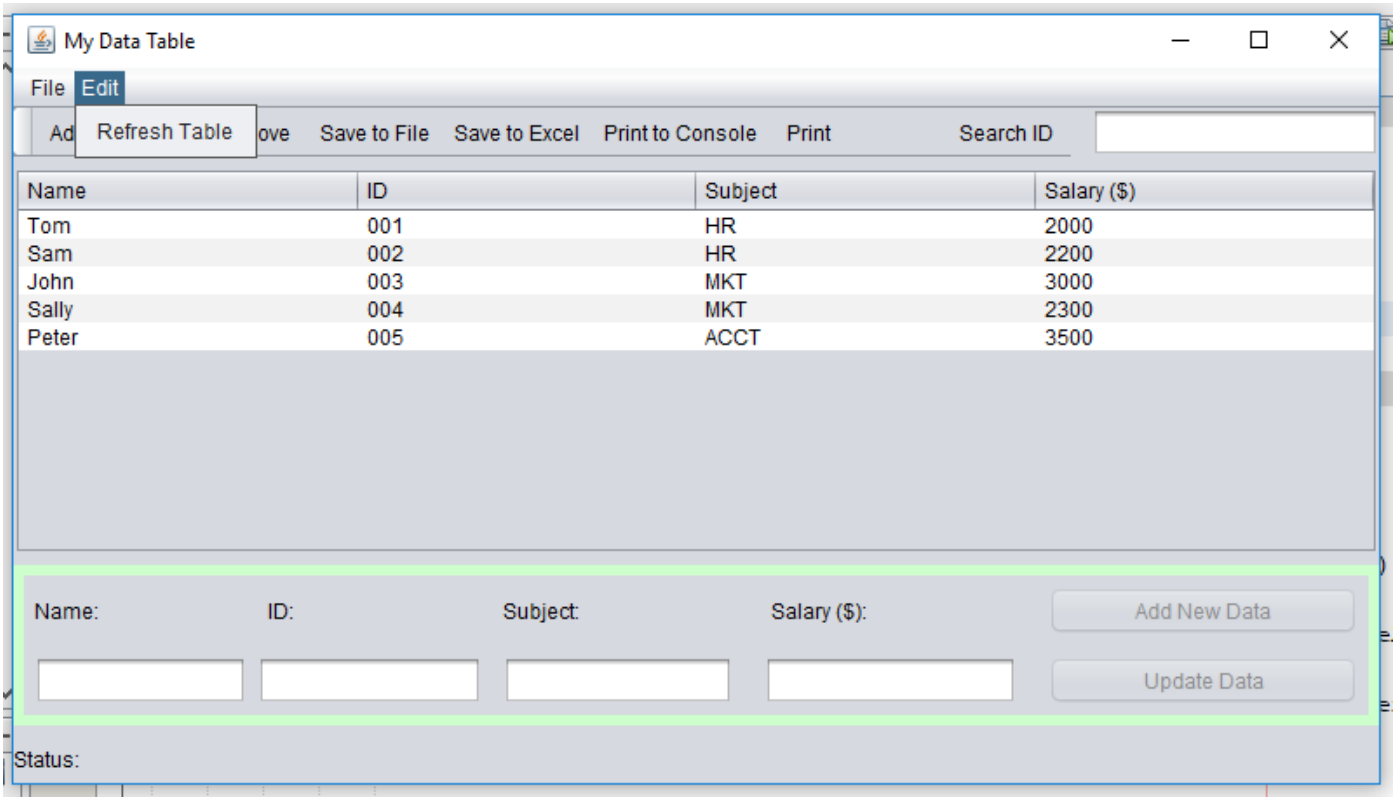
1. **Implement a JTable with two buttons**
    a. **Load Data – loads data from a .txt file**
    b. **Save Data – saves data into a .txt file**

Code Support:

```
private void loadData(){
    //String filename = "Table_Data.txt";
    File file = new File ("C:\\Users\\Admin\\Desktop\\Table_Data.txt");

    try{
        FileReader fr = new FileReader(file);
        BufferedReader br = new BufferedReader(fr);

        String details;
        while ((details=br.readLine())!=null){
            StringTokenizer tkn = new StringTokenizer (details," ");
            String name = tkn.nextToken();
            String id = tkn.nextToken();
            String subject = tkn.nextToken();
            String salary = tkn.nextToken();

            Vector<String> dataset = new Vector<String>();
            dataset.add(name); dataset.add(id); dataset.add(subject); dataset.add(salary);
            data.add(dataset);
        }
        changed=true;
        br.close(); fr.close();
    }catch(Exception e){

    }
}
```

Task 3:

Implement a Table with the following features:



Code support:

```
private void dataRefresh(){
    String filePath = "C:\\Users\\Admin\\Desktop\\Table_Data.txt";
    File file = new File(filePath);

    try {
        FileReader fr = new FileReader(file);
        BufferedReader br = new BufferedReader(fr);

        DefaultTableModel model = (DefaultTableModel)tblData.getModel();
        Object[] lines = br.lines().toArray();

        int rowcount = model.getRowCount();
        for (int i = (rowcount - 1); i >= 0; i--) {
        model.removeRow(i);
        }

        for(int i = 0; i < lines.length; i++){
            String[] row = lines[i].toString().split(" ");
            model.addRow(row);
        }
        tblData.setModel(model);

    } catch (FileNotFoundException ex) {
        JOptionPane.showMessageDialog(rootPane, "Data couldn't be loaded", "Alert!", JOptionPane.ERROR_MESSAG
        }
}
```