**Practical No: 6**

**Excel Automation**

**AIM: A) Create an application automating the read, write and append operation on excel file**

**READ**

1. Open main workflow
2. Activities -> Excel application scope
3. Add path of excel file  
   A screenshot of a computer

   Description automatically generated
4. In DO -> add read range -> create variable (myData)
5. Add output data table -> create variable (result)

A screenshot of a computer

Description automatically generated

1. Add message box  
   A screenshot of a computer

   Description automatically generated

**OUTPUT**

A screenshot of a computer

Description automatically generated A screenshot of a computer

Description automatically generated

**WRITE**

1. Open main workflow
2. Activities -> Excel application scope
3. Add path of excel file  
   A screenshot of a computer

   Description automatically generated
4. In Do -> Add build data table -> add table data -> create variable(myData)
5. Add write range  
   A screenshot of a computer

   Description automatically generated

**OUTPUT**

A screenshot of a computer

Description automatically generated

**Append**

1. Open main workflow
2. Activities -> Excel application scope
3. Add path of excel file  
   **A screenshot of a computer

   Description automatically generated**
4. In Do -> Add Read Range -> Sheet2 -> create variable(myData)
5. Add Append range  
   **A screenshot of a computer

   Description automatically generated**

**OUTPUT**

A table with numbers and letters

Description automatically generated

**AIM: B) Automate the process to extract data from an excel file into a data table and vice versa.**

1. **Excel to Datatable**
2. Prepare an Excel file with data.  
   A screenshot of a computer

   Description automatically generated
3. Use the "Excel Application Scope" activity to specify the Excel file location.  
   A screenshot of a white box

   Description automatically generated
4. Read Range:
   1. Add the "Read Range" activity inside the Excel Application Scope.  
      A screenshot of a computer

      Description automatically generated
   2. Create a variable (e.g., DataTableVar) to store the output DataTable.  
      A white rectangular object with a black border

      Description automatically generated
5. Output DataTable:
   1. Use the "Output Data Table" activity.
   2. Set the DataTableVar as the DataTable.  
      A screenshot of a computer

      Description automatically generated
   3. Create a new variable (e.g., TableVar) for the output.  
      A white rectangular object with a black border

      Description automatically generated
6. Add a "Message Box" activity.  
   A screenshot of a computer

   Description automatically generated

**OUTPUT:**

**A screenshot of a computer

Description automatically generated**

1. **Datatable to excel**
2. Use the "Excel Application Scope" activity to specify the Excel file location.  
   A screenshot of a phone

   Description automatically generated
3. Add the "Build DataTable" activity.  
   A screenshot of a computer

   Description automatically generated
4. Define the structure of the DataTable (columns).  
   A screenshot of a computer

   Description automatically generated
5. Create a variable (e.g., Data2) to store the DataTable.  
   A white rectangular object with a black border

   Description automatically generated
6. Add the "Write Range" activity inside the Excel Application Scope.  
   A screenshot of a computer

   Description automatically generated
7. Configure it to write the DataTable (Data2) to a specific sheet.  
   A white rectangular object with black lines

   Description automatically generated with medium confidence
8. Save your workflow and run the sequence.

**OUTPUT:**

A screenshot of a computer

Description automatically generated

**LEARNING:**

Automating Excel data extraction involves specifying file locations, reading and outputting DataTables, and handling DataTable structures, enhancing efficiency in data manipulation.