Test Case #	Purpose of the test case	Input Data	Expected Output
1	Test the function to add a Full-Time employee with correct name, department, date hired and salary.	Name: Maharshi Patel Department: CS Date Hired: 03/01/2021 Employment Type: Full Time Annual Salary: 10000	The hours worked and the management level radio buttons will be disabled. The employee will be added.
2	Test the function to add a Full-Time employee with correct name, department, date hired but incorrect salary.	Name: Maharshi Patel Department: CS Date Hired: 03/01/2021 Employment Type: Full Time Annual Salary: -1	The hours worked and the management level radio buttons will be disabled. The employee will be not be added and an error statement for annual salary will be displayed.
3	Test the function to add a Full-Time employee with correct name, department, salary but incorrect date hired.	Name: Maharshi Patel Department: CS Date Hired: 03/100/2021 Employment Type: Full Time Annual Salary: 10000	The hours worked and the management level radio buttons will be disabled. The employee will be not be added and if the date is entered manually then an error will be displayed else the date picker will not show invalid dates.
4	Test the function to add a Full-Time employee with correct name, salary, date hired but invalid department.	Name: Maharshi Patel Department: Math Date Hired: 03/1/2021 Employment Type: Full Time Annual Salary: 100000	The hours worked and the management level radio buttons will be disabled. The employee will be not be added as the user can only choose from the three radio buttons available.
6	Test the function to add a Part-Time employee with correct name, department, hourly rate, date hired.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Part Time Hourly Rate: 20	The hours worked, management level radio buttons will be disabled. The employee will be added.
7	Test the function to add a Part-Time employee with correct name, hourly rate and date hired but invalid department.	Name: Maharshi Patel Department: Math Date Hired: 03/1/2021 Employment Type: Part Time Hourly Rate: 20	The hours worked, management level radio buttons will be disabled. The employee will not be added as there are only three department radio buttons to choose from.

8	Test the function to add a Part-Time employee with correct name, hourly rate and department but invalid date hired.	Name: Maharshi Patel Department: CS Date Hired: 03/100/2021 Employment Type: Part Time Hourly Rate: 20	The hours worked, management level radio buttons will be disabled. The employee will not be added and an error for the invalid date will be shown.
9	Test the function to add a Part-Time employee with correct name, date hired and department but hourly rate less than 0.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Part Time Hourly Rate: -1	The hours worked, management level radio buttons will be disabled. The employee will not be added and an error for the invalid hourly rate will be shown.
10	Test the function to add a Management employee with correct name, date hired and department, annual salary and management level.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 100000 Management Level: Manager	The hours worked button will be disabled. The employee will be added.
11	Test the function to add a Management employee with correct name, date hired and annual salary and management level but invalid department.	Name: Maharshi Patel Department: Math Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 100000 Management Level: Manager	The hours worked button will be disabled. The employee will not be added as there will be only three departments to choose from.
12	Test the function to add a Management employee with correct name, department and annual salary and management level but invalid date hired.	Name: Maharshi Patel Department: CS Date Hired: 03/100/2021 Employment Type: Management Annual Salary: 100000 Management Level: Manager	The hours worked button will be disabled. The employee will not be added and an error for invalid date will be shown.
13	Test the function to add a Management employee with correct name, department and date hired and management level but invalid salary.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Annual Salary: -1 Management Level: Manager	The hours worked button will be disabled. The employee will not be added and an error for invalid salary will be shown.

14	Test the function to add a Management employee with correct name, department and date hired and salary but no management level.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 100000	The hours worked button will be disabled. The employee will be added as a Manager by default.
15	Test the function to add any employee with only name, date hired, annual salary/ rate and management level.	Name: Maharshi Patel Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 1000000 Management Level: Manager	The hours worked button will be disabled. The employee will not be added as CS Department employee by default.
16	Test the function to add any employee with only name, department, annual salary/ rate and management level.	Name: Maharshi Patel Department: CS Employment Type: Management Annual Salary: 1000000 Management Level: Manager	The hours worked button will be disabled. The employee will not be added and error for date not selected will be shown.
17	Test the function to add any employee with only name, department, date hired, and management level.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Management Level: Manager	The hours worked button will be disabled. The employee will not be added and error for salary cannot be empty will be shown.
18	Test the function to add any employee that already exists in the database.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 1000000 Management Level: Manager	The employee will not be added because it is already in the list. An error will be for the employee already exists.
19	Testing the clear function.	Clicking the clear button	The data fields and the text area will be cleared.
20	Testing the function to remove an employee with the correct name, department, date hired.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021	The employee will be removed and an error will be shown.

21	Testing the function to remove an employee with the correct name, date hired but invalid department	Name: Maharshi Patel Department: ECE Date Hired: 03/1/2021	The employee will not be removed, and an error will be shown. And the user can only choose from the three departments.
22	Testing the function to remove an employee with the correct name, department but invalid date hired.	Name: Maharshi Patel Department: CS Date Hired: 03/100/2021	The employee will not be removed, and an error will be shown.
23	Testing the function to remove an employee with the correct name, department, invalid date hired and correct fields for Employment type, annual salary /rate, hours worked and management level.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 100000 Management Level: Manager	The employee will be removed.
24	Testing the function to remove an employee with the correct name, department, invalid date hired and incorrect fields for Employment type, annual salary /rate, hours worked and management level.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 100000 Management Level: Department Head	The employee will be removed.
25	Testing the set hours function for employees other than Part-Time.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Management Annual Salary: 100000 Management Level: Department Head	The hours will not be set as the set hours button will be disabled.
26	Testing the set hours function for Part-Time employees with correct name, department and employee type and valid hours.	Name: Maharshi Patel Department: CS Date Hired: 03/1/2021 Employment Type: Part-time Hours Worked: 20	The hours will be set and the message will be reported.

27	Testing the set hours function for Part-Time employees with correct name, date hired and valid hours but invalid department	Name: Maharshi Patel Department: ECE Date Hired: 03/1/2021 Employment Type: Part-time Hours Worked: 20	The hours will not be set and error for employee not found will be shown. And there are only three departments to choose from.
28	Testing the set hours function for Part-Time employees with correct name and valid hours, department but invalid date hired.	Name: Maharshi Patel Department: ECE Date Hired: 03/100/2021 Employment Type: Part-time Hours Worked: 20	The hours will not be set and error for employee not found will be shown.
29	Testing the set hours function for Part-Time employees with correct name, date hired and department but hours over 100	Name: Maharshi Patel Department: ECE Date Hired: 03/1/2021 Employment Type: Part-time Hours Worked: 120	The hours will not be set and error for the hours greater than 100 will be shown.
30	Testing the set hours function for Part-Time employees with correct name, department but hours less than 0.	Name: Maharshi Patel Department: ECE Date Hired: 03/1/2021 Employment Type: Part-time Hours Worked: -1	The hours will not be set and error for the hours less than 0.
31	Testing the import function for non-text files.	A non-text file	A user can only select the text files. The data will not be imported.
32	Testing the import function for a valid file.	A text file	A text file will be imported from the file chooser and the data will be stored in the program.
33	Testing the import function for an invalid file.	A text file	The data that is valid will be imported and the lines that are invalid will be reported to the user.
34	Testing the export function for non-text files.	A non-text file name	The user can only select or make a text file for the export. The data will not be exported.

35	Testing the export function for a non existent file.	A non-existent file	The data will be exported to the new file.
36	Testing the export function for an existent file.	A existent file	The data will be exported to the test file and any old data will be replaced if the user chooses to replace else the user can select a new file.
37	Testing the print function for an empty database.	Clicking the print button	An error for the database is empty will be reported.
38	Testing the print function for a valid database.	Clicking the print button	The details of the employee will be displayed.
39	Testing the print by date function for an empty database.	Clicking the print by date button.	An error for the database is empty will be reported.
40	Testing the print by date function for a valid database.	Clicking the print by date button.	The details of the employee will be displayed sorted by date hired.
41	Testing the print by department function for an empty database.	Clicking the print by department button.	An error for the database is empty will be reported.
42	Testing the print by department function for a valid database.	Clicking the print by department button.	The details of the employee will be displayed sorted by department.

43	Testing the process payment function to calculate payments for an empty database.	Clicking the Process Payments button.	An error for the database is empty will be reported.
44	Testing the process payment function to calculate payments for a valid database.	Clicking the Process Payments button.	The payments will be calculated according to the employment type by dividing the annual salary by 26 and adding any compensation or calculating the payment based on a hourly wage and overtime for part-time employees.