**Practical No. 3: Develop Javascript to implement array functionalities**

1. **Practical Significance:** The Array object lets you store multiple values in a single variable. It stores a fixed-size sequential collection of elements of the same type. An array is used to store a collection of data, but it is often more useful to think of an array as a collection of variables of the same type.

### Relevant Program Outcomes (POs):

* Basic knowledge: Apply knowledge of basic mathematics, sciences and basic engineering to solve the computer group related problems.
* Discipline knowledge: Apply Computer Programming knowledge to solve the computer group related problems.
* Experiments and practice: Plan to perform experiments and practices to use the results to solve the computer group related problems.
* Engineering tools: Apply relevant Computer programming / technologies and tools with an understanding of the limitations.
* Individual and Team work: Function effectively as a leader and team member in diverse/multidisciplinary teams.
* Communication: Communicate effectively in oral and written form.

1. **Competency and Practical skills:**
2. Write a simple Javascript to perform various functions on array

### Relevant Course Outcome(s):

Implement arrays and functions in Javascript.

### Practical Outcome (PrOs):

1. Develop Javascript to to perform various functions on array

### Relevant Affective domain related Outcome(s):

* 1. Follow safety practices.
  2. Practice good housekeeping
  3. Demonstrate working as a leader/ a team member.
  4. Follow ethical practices.

1. **Minimum Theoretical Background:**

Array Methods

1. concat() - Returns a new array comprised of this array joined with other array(s) and/or value(s).

2. join() - Joins all elements of an array into a string.

3. pop() -Removes the last element from an array and returns that element.

4. push() - Adds one or more elements to the end of an array and returns the new length of the array.

* 1. reverse()- Reverses the order of the elements of an array -- the first becomes the last, and the last becomes the first.
  2. shift() - Removes the first element from an array and returns that element.
  3. slice() - Extracts a section of an array and returns a new array.

8. sort() - Sorts the elements of an array

1. **Resources required**

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| --- | --- | --- | --- | --- |
| Sr. No. | Name of Resource | Broad specification | Quantity | Remark (If any) |
| 1 | Computer System | Computer (i3-i5 preferable), RAM minimum 2 GB and onwards | As per batch size | For all Experiments |
| 2 | Operating System | Windows / Linux |
| 3 | Development Software | Browser and Notepad/any Text Editor  Free Webpage Designing Tool  Any IDE |

1. **Resources used**

| S. No. | Name of Resource | Broad Specification | Qty | Remarks (If any) |
| --- | --- | --- | --- | --- |
|  | Computer System  with broad specifications | Intel Core –i5  RAM – 8 GB | 1 PC / Student |  |
|  | Operating System | Windows 10 |  |
|  | Development Software | Micromedia Dreamviewer 8 |  |

Print out of Program along with title

1. **Result**

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1. **Conclusion**

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| Marks Obtained | | | Dated Signature of Teacher |
| Process Related ( ) | Product Related ( ) | Total ( ) |  |
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