Assignments Arrays

1. Create a single dimensional array and do the following
   1. Find addition of digits of all every individual number in the array
   2. Find factorial of only prime numbers in the array
   3. Find maximum prime number in the array
   4. Create a copy of array, but while copying data into another array, if the number is prime and <5 then copy the reverse of the number, otherwise copy number as it is
   5. Create a array of size 20, accept string from user and store it in the array, in such a fashion that all the string whose 2nd character is same should be together in the array In the following array if user adds bat, then this string should get added after xamp, if user adds linux, then add at the end.

      ```
      arr[20]

      accept a string from user
      save it in the array
      pat,check,mat,abc,ahd,should,Xamp

      [pat,mat,xamp,check,ahd,should,abc]
      ```

2. Create 2D array
   1. Reverse every row in the array
   2. Find maximum odd number in every row
   3. Find average for each row and column and find addition on all row averages and all column averages

Sorting algorithm

1. Create a class employee to store empid, ename,salary, create a array of employee objects of size 20; add 15 employee objects in it. And sort it based on salary using bubble sort,
   So 5 locations are free,
   Accept 5 more elements from user and add these elements in the array, by using insertion sort.
2. Create an array of Strings, sort it by using merge and quick sort
3. Create an array of employees, sort it by using heap sort and quick sort
4. Create an array size 10 of integers, add 8 values in it , sort the numbers, after sorting accept 2 more numbers from user one by one and add it in the array, using insertion sort.

LinkedList

1. Display singly list in the reverse order
2. Delete all prime numbers from singly linked list
3. Reverse the singly linked list
4. Add a value in singly linked list before given value
5. In Doublylinked list add after given value