MILESTONE 1

1. https://leetcode.com/problems/jewels-and-stones/

2. https://leetcode.com/problems/merge-strings-alternately/

```
class Solution {
  public String mergeAlternately(String word1, String word2) {
    String merged="";
    int 11,12;
    11=word1.length();
    12=word2.length();
    if(11<12){
       for(int i=0;i<11;i++)
       {
         merged=merged+word1.charAt(i)+word2.charAt(i);
       }
       merged=merged.concat(word2.substring(11));
    }
    else{
       for(int i=0;i<12;i++)
       {
         merged=merged+word1.charAt(i)+word2.charAt(i);
       }
       merged=merged.concat(word1.substring(12));
     }
    return merged;
  }}
```

 ${\bf 3.} \quad \underline{https://leetcode.com/problems/minimum-number-of-steps-to-make-two-strings-anagram/}$

```
class Solution {
  public int minSteps(String s, String t) {
     int freq[]=new int[26];
     int res=0;
     for(int i=0;i<s.length();i++)
       freq[s.charAt(i)-'a']++;
       freq[t.charAt(i)-'a']--;
     }
     for(int i=0;i<26;i++)
       if(freq[i]>0)
          res=res+freq[i];
     }
     return res;
  }
}
```

4. https://leetcode.com/problems/spiral-matrix/

```
class Solution {
  public List<Integer> spiralOrder(int[][] matrix) {
     List<Integer> ans=new ArrayList<Integer>();
     int m,n;
     m=matrix.length;
     n=matrix[0].length;
     int dir=0;
     int t,d,l,r;//taking four pointers
     t=0;
     d=m-1;
     1=0;
     r=n-1;
     while(t<=d && l<=r)
     {
       if(dir==0){
       for(int i=1;i<=r;i++)
            ans.add(matrix[t][i]);
       t++;}
       else if(dir==1){
       for(int i=t;i<=d;i++)
            ans.add(matrix[i][r]);
       r--;}
```

```
else if(dir==2){
    for(int i=r;i>=l;i--)
        ans.add(matrix[d][i]);
    d--;}
    else if(dir==3){
        for(int i=d;i>=t;i--)
            ans.add(matrix[i][1]);
        l++;}
        dir=(dir+1)%4;
    }
    return(ans);
}
```

5. https://leetcode.com/problems/sort-array-by-parity/

```
class Solution {
  public int[] sortArrayByParity(int[] nums) {
     int[] ans=new int[nums.length];
     int k=0;
     for(int i=0;i<nums.length;i++)</pre>
     {
       if(nums[i]\%2==0)
       {
          ans[k]=nums[i];
          k++;
        }
     }
     for(int i=0;i<nums.length;i++)</pre>
     {
       if(nums[i]\%2!=0)
          ans[k]=nums[i];
          k++;
     return ans;
  }}
```

```
class Solution {
  public int maxProfit(int[] prices) {
    int max_profit=0;
  int min=Integer.MAX_VALUE;
  for(int i=0;i<prices.length;i++)
  {
    if(prices[i]<min)
      min=prices[i];
    else if(prices[i]-min>max_profit)
      max_profit=prices[i]-min;
  }
  return max_profit;
}
```

7. https://leetcode.com/problems/best-time-to-buy-and-sell-stock-ii

```
class Solution {
  public int maxProfit(int[] prices) {
    int max_profit=0;
    for(int i=1;i<prices.length;i++)
    {
      if(prices[i]>prices[i-1])
        max_profit=max_profit+(prices[i]-prices[i-1]);
    }
    return max_profit;
}
```