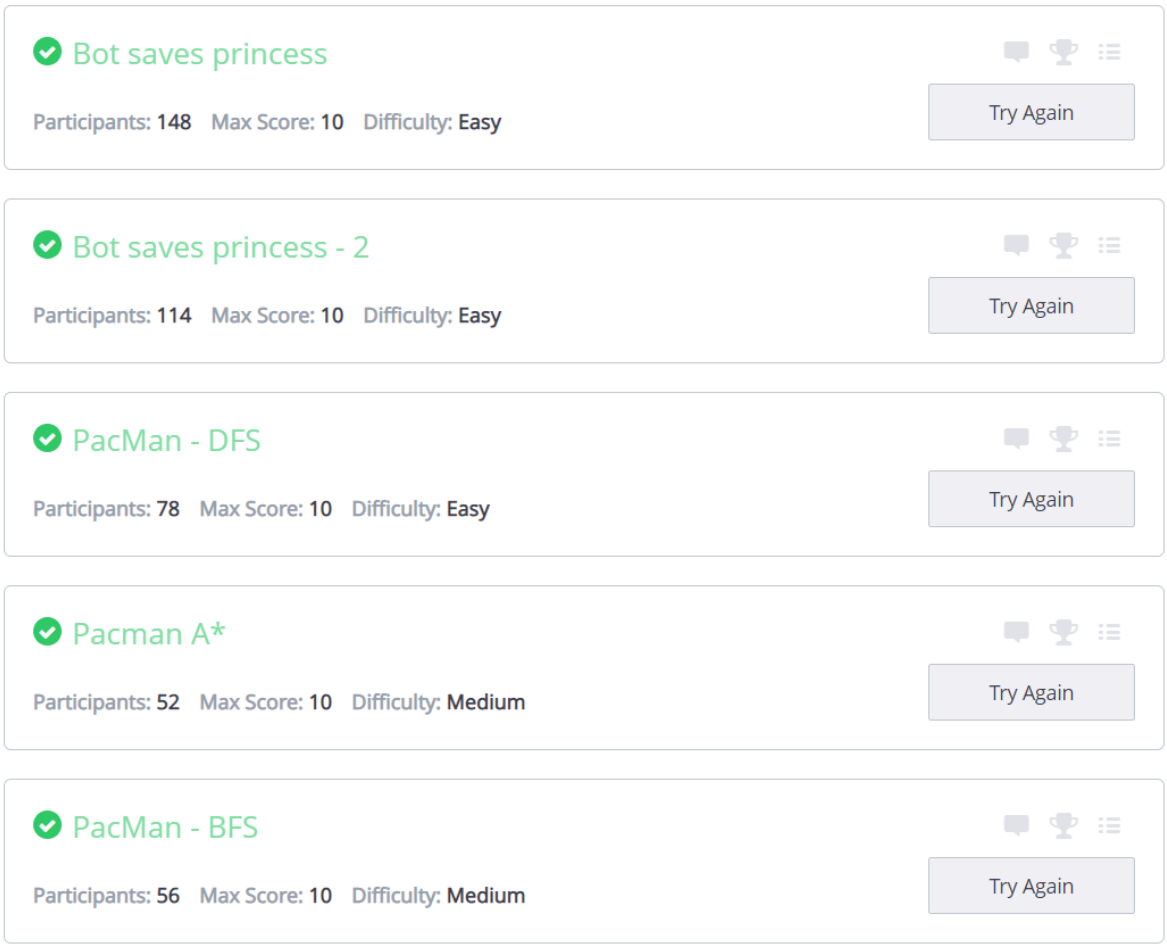
Name: S V L N Raju

ID No.: 2100031503

Section: 10

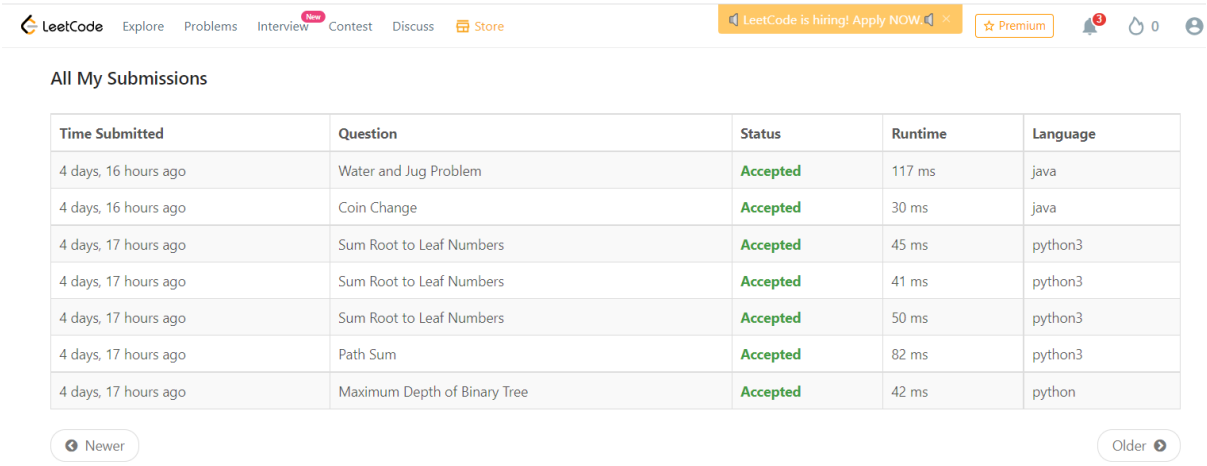
HACKERRANK SUBMISSIONS



LEETCODE LEADERBOARD

Rank	User	Score	Time	Country
1	KLU_2100031503	61.40	933:16:31	
1	h2100032143	61.40	951:58:29	
1	h2100032091	61.40	952:08:02	
1	klu_2100031755	61.40	986:36:52	
1	h2100032079	61.40	996:06:49	
1	h2100032102	61.40	1000:10:26	
1	h2100031773	61.40	1015:07:59	
1	h2100031251	61.40	1015:24:35	
1	klu_2100031746	61.40	1018:48:07	
1	h2100031559	61.40	1019:27:47	

LEETCODE SUBMISSIONS



LEETCODE CODES:

1.Water and Jug problem

Code: public class Solution {

```
    public boolean canMeasureWater(int j1, int j2, int j) {
        if(j1>j2)
            return canMeasureWater(j2,j1,j);
        if(j > j1+j2)
            return false;
        Set<Integer> failSet = new HashSet<>();

        int X = 0;
        int Y = 0;

        while(true){
```

```
            int res = X * j1 + Y * j2;
            if(failSet.contains(res))
               return false;
            if(res == j){
               return true;
            }else if(res < j){
               Y++;
            }else{
               X--;
            }
            failSet.add(res);
         }
      }
   }
```

2.Coin Change

Code:

```
class Solution
{
   public int coinChange(int[] coins, int amt)
   {
      if(amt==0)
      {
      return 0;
      }

   int[] d = new int[amt+1];
   Arrays.fill(d, Integer.MAX_VALUE);
   d[0]=0;
   for(int i=0; i<=amt; i++){
```

```
    if(d[i]==Integer.MAX_VALUE){
       continue;
    }
    for(int coin: coins)
    {
       if(i<=amt-coin)
       {
          d[i+coin] = Math.min(d[i]+1, d[i+coin]);
       }
    }
  }
  if(d[amt]==Integer.MAX_VALUE)
  {
    return -1;
  }
  return d[amt];
  }}
```

3. Sum Root to Leaf Numbers

Code:

```
class Solution:
 def sumNumbers(self, root: Optional[TreeNode]) -> int:
  r = []
  def d(root, sum):
    nonlocal r
    sum += root.val
    if root.left == None and root.right == None:
      r.append(sum)
      return
    if root.left: d(root.left, sum * 10)
    if root.right: d(root.right, sum * 10)
  if root:
    d(root, 0)
```

```
        return sum(r)
    return 0
```

4.Path Sum

Code:

```
class Solution:
    def hasPathSum(self, root: TreeNode, sum: int) -> bool:
        def Help(node, t1):
            if not node:
                return False
            t1 -= node.val
                if (t1 == 0) and (not node.left) and (not node.right):
                return True
            return Help(node.left, t1) or Help(node.right, t1)
        if not root:
        return
        return Help(root, sum)
```

5. Maximum Depth of Binary Tree

Code:

```
class Solution(object):
    def maxDepth(self, root):
        """
        :type root: TreeNode
        :rtype: int
        """
        return 1 + max(self.maxDepth(root.left), self.maxDepth(root.right)) if root else 0
```