

1 16-may-2022 HackerRankProblem-java implementation :

2 -----

3

4 test1: Fibonnic number:

5 -----

6 package HacerRankProblems;

7 import java.util.Scanner;

8 public class Test1FibonnicSeries {

9

10 public static void main(String[] args)

11 {

12 Scanner scan=new Scanner(System.in);

13 System.out.println("Enter the n th value : ");

14 int n=scan.nextInt();

15 int a=-1,b=1;

16 int temp;

17 for(int i=0;i<n;i++)

18 {

19 temp=a+b;

20 System.out.println(temp);

21 a=b;

22 b=temp;

23 }

24

25

26 }

27

28 }

29

30 output :

31 -----

32 Enter the n th value :

33 5

34 0

35 1

```
36 1
37 2
38 3
39 -----
40
41 Test1: primeOrNot
42 -----
43 package HacerRankProblems;
44 import java.util.Scanner;
45 class PrimeCheck
46 {
47     void displayPrime(int num)
48     {
49         int flag=0;
50         for(int i=2;i<Math.sqrt(num);i++)
51         {
52             if(num%i==0)
53             {
54                 System.out.println(0);
55                 flag=1;
56                 break;
57             }
58         }
59         if(flag==0)
60         {
61             System.out.println(1);
62         }
63     }
64 }
65 }
66 public class Test1PrimeOrNot {
67
68     public static void main(String[] args) {
69         Scanner scan=new Scanner(System.in);
70         System.out.println("Enter the number : ");
```

```
71     int num=scan.nextInt();
72     PrimeCheck pc=new PrimeCheck();
73     pc.displayPrime(num);
74
75
76 }
77
78 }
79 output:
80 -----
81 Enter the number :
82 77
83 0
84 -----
85 Test2 : Finding sum of digits of a number until sum becomes single digit
86 -----
87 package com.basicjava;
88 import java.util.Scanner;
89 class Add
90 {
91     void add(int num)
92     {
93         int r=0,sum=0,add=0;
94         while(num!=0)
95         {
96             r=num%10;
97             sum=sum+r;
98             num=num/10;
99             if(num==0)
100             {
101                 int j;
102                 while(sum!=0)
103                 {
104                     j=sum%10;
105                     add=add+j;
```

```

106         sum=sum/10;
107     }
108 }
109 }
110     System.out.println(add);
111 }
112 }
113 public class SumOfSum {
114     public static void main(String[] args) {
115         Scanner scan=new Scanner(System.in);
116         System.out.println("Enter the number want to sum : ");
117         int num=scan.nextInt();
118         Add a=new Add();
119         a.add(num);
120
121
122     }
123
124 }

```

125 **output:**

126 **1234**

127 **1**

128 -----

129

130 **Test2 : Check if a given number is Fibonacci number**

131 -----

132 **package HacerRankProblems;**

133 **import java.util.Scanner;**

134

135 **public class Test2CheckNumberIsFibonnicOrNor {**

136

137 **public static void main(String[] args) {**

138 **Scanner scan=new Scanner(System.in);**

139 **System.out.println("Enter the number to check : ");**

140 **int n = scan.nextInt();**

```
141     int sum = 5 * n * n + 4;
142     System.out.println("sum value : " + sum);
143     int sumSqu = (int) Math.sqrt(sum);
144     System.out.println("square root value of sum is : " + sumSqu);
145     int mulOfSumSqu = sumSqu * sumSqu;
146     System.out.println("Multipla of sum squqre is : " + mulOfSumSqu);
147
148     int diff = 5 * n * n - 4;
149     System.out.println("diff value : " + diff);
150     int diffSqu = (int) Math.sqrt(diff);
151     System.out.println("square root value of diff is : " + diffSqu);
152     int mulOfDiffSqu = diffSqu * diffSqu;
153     System.out.println("Multiplay of diff square is : " + mulOfDiffSqu);
154     if (sum == mulOfSumSqu || diff == mulOfDiffSqu) {
155         System.out.println("Yes");
156     } else
157         System.out.println("No");
158 }
```

```
159
160 }
161 output:
```

```
162 -----
```

```
163 Enter the number to check :
```

```
164 11
```

```
165 sum value : 609
```

```
166 square root value of sum is : 24
```

```
167 Multipla of sum squqre is : 576
```

```
168 diff value : 601
```

```
169 square root value of diff is : 24
```

```
170 Multiplay of diff square is : 576
```

```
171 No
```

```
172
```

```
173 Enter the number to check :
```

```
174 2
```

```
175 sum value : 24
```

```
176 square root value of sum is : 4
177 Multipla of sum squgre is : 16
178 diff value : 16
179 square root value of diff is : 4
180 Multiplay of diff square is : 16
181 Yes
```

```
182
183 -----
```

```
184
185 Test3: Remove all occurrences of a character in a string
```

```
186 -----
```

```
187 package HacerRankProblems;
188 import java.util.Scanner;
189 public class Test3RemovalOfCharacters {
190
191     public static void main(String[] args) {
192         Scanner scan=new Scanner(System.in);
193         System.out.println("Enter the String : ");
194         String a=scan.nextLine();
195         char b[]=a.toCharArray();
196         System.out.println("Enter the character to remove : ");
197         char c=scan.next().charAt(0);
198         for(int i=0;i<b.length;i++)
199         {
200             if(b[i]==c)
201             {
202                 continue;
203             }
204             else
205             {
206                 System.out.print(b[i]);
207             }
208         }
209
210     }
```

```
211
212 }
213 output:
214 -----
215 Enter the String :
216 whatsapp
217 Enter the character to remove :
218 a
219 whtspp
220 -----
221 Test3 :  UpperToLowerCase(Vice-Versa)
222 -----
223 package com.basicjava;
224 import java.util.Scanner;
225 public class AlphabetConversion {
226     public static void main(String args[])
227     {
228         Scanner scan=new Scanner(System.in);
229         String a;
230         System.out.println("enter your name: ");
231         a=scan.nextLine();
232         char b[]=a.toCharArray();
233         int size=a.length();
234         for(int i=0;i<size;i++)
235         {
236             char result = 0;
237             if((b[i]>=97) && (b[i]<=122))
238             {
239                 result=(char) ((char)b[i]-32);
240             }
241             else if((b[i]>=65) && (b[i]<=90))
242             {
243                 result=(char)(b[i]+32);
244             }
245         }
```

```
246         System.out.print(result);
247
248     }
249
250
251 }
252
253 }
254 output :
255 -----
256 enter your name:
257 Angel bAbY
258 aNGEL BaBy
259 -----
260 22-may-2022      RemovalOFAllDuplicates-String
261 -----
262
263 package com.basicjava;
264
265 import java.util.HashSet;
266
267 public class RemoveAllDuplicate {
268
269     public static void main(String[] args) {
270         String input="monoonabc3";
271         char b[]=input.toCharArray();
272         HashSet <Character> hs= new HashSet <Character>();
273         StringBuilder sb=new StringBuilder();
274         for(char c : b)
275         {
276             if(!(hs.add(c)))
277             {
278
279                 sb.append(c + "|");
280                 continue;
```



```

281     }
282 }
283 System.out.println("duplicates : " +sb);
284 String res=input.replaceAll(sb.toString(), "");
285 System.out.println("After removal of Duplicate : " +res);
286
287
288 }
289
290 }

```

```

291
292 -----
293 output :
294 -----
295 duplicates : o|o|n|
296 After removal of Duplicate : mabc3
297 -----
298 22-may-2022      RemovalOFAllDuplicates-Number
299 -----

```

```

300 package HacerRankProblems;
301 import java.util.Scanner;
302 import java.util.ArrayList;
303 import java.util.Arrays;
304 import java.util.HashSet;
305 import java.util.List;
306
307 public class RemovingAllDuploicatesNumber {
308
309     public static void main(String[] args) {
310         Scanner scan=new Scanner (System.in);
311         System.out.println("Enter the size : ");
312         int size=scan.nextInt();
313         List<Integer> inputList = new ArrayList<Integer>();
314         for(int i=0;i<size;i++)
315         {

```

```

316     inputList.add(scan.nextInt());
317 }
318 HashSet<Integer> hs = new HashSet<Integer>();
319 HashSet<Integer> duplicateValues = new HashSet<Integer>();
320 for (int dupNum : inputList) {
321     if (!(hs.add(dupNum))) {
322
323         duplicateValues.add(dupNum);
324     }
325 }
326 System.out.println("Collected Duplicated numbers are : " +duplicateValues);
327
328 inputList.removeAll(duplicateValues);
329 int size1=inputList.size();
330 System.out.println("The size of list after removing all duplicates : " +size1);
331 System.out.println("After removal of all duplicates are : ");
332     for(int X : inputList)
333     {
334         System.out.print(X +" ");
335     }
336 }
337
338 }
339 -----
340 output :
341 -----
342 Enter the size :
343 5
344 1 2 3 2 1
345 Collected Duplicated numbers are : [1, 2]
346 The size of list after removing all duplicates : 1
347 After removal of all duplicates are :
348 3
349 -----
350 Test4 :      Test4AlphaNumericarrangement

```

```
351 *****
352
353 package HacerRankProblems;
354 import java.util.ArrayList;
355
356 public class Test4AlphaNumericarrangement {
357
358     public static void main(String[] args)
359     {
360         String a="moo10b4n3b5";
361         char b[]=a.toCharArray();
362         int sum=0;
363         ArrayList<Integer> numList=new ArrayList<Integer>();
364         ArrayList<Character>charList=new ArrayList<Character>();
365         for(char c : b)
366         {
367             if(Character.isDigit(c))
368             {
369                 sum+=Character.getNumericValue(c);
370                 numList.add(Character.getNumericValue(c));
371             }
372             else
373             {
374                 charList.add(c);
375             }
376         }
377         System.out.println("The Sum of Given Integer : " +sum);
378         System.out.println("After Separation");
379         numList.forEach(System.out::print);
380         System.out.println();
381         charList.forEach(System.out::print);
382
383     }
384 }
385 OuTPut:
```

```
386 -----
387 The Sum of Given Integer : 13
388 After Separation
389 10435
390 moobnb
391 -----
392 Test5:    Armstrong NUMBER
393 *****  *****
394
395 package com.basicjava;
396 import java.util.Scanner;
397 public class ArmstrongNumber {
398     public static void main(String args[])
399     {
400         Scanner scan=new Scanner(System.in);
401         int num;
402         int count=0;
403         int sum=0;
404         System.out.println("enter the number : ");
405         num=scan.nextInt();
406         int a=num;
407         int temp = num;
408         while(num!=0)
409         {
410             count++;
411             num=num/10;
412
413         }
414         while(a!=0)
415         {
416             int individual=a%10;
417             sum=sum+(int)Math.pow(individual,count);
418             a=a/10;
419
420         }
```

```

421     System.out.println("the num value is : " +sum);
422     if(sum==temp)
423     {
424         System.out.println("Amstrong number");
425     }
426     else
427         System.out.println(" Not Amstrong number");
428
429     scan.close();
430
431
432
433 }
434
435 }

```

437 **OUTPUT:**

438 -----

439 enter the number :

440 153

441 the num value is : 153

442 Amstrong number

443

444 enter the number :

445 234

446 the num value is : 99

447 Not Amstrong number

448 -----

449 **test6: String Manipulation**

450 \*\*\*\*\*

451 **Problem Statement :**

452 ++++++

453 add 'ing' at the end of a given string (length should be atleast 3)

454 .if the given string already end with 'ing' then add 'ly' instead.

455 If the string length of the given string is less than 3,leave it.

```
456
457 INPUT : String is a String used for String
458 OUTPUT : Stringly is a Stringly using foring
459
460
461 package com.basicjava;
462 import java.util.Scanner;
463 public class StringLyProblem {
464
465     public static void main(String[] args) {
466         Scanner scan=new Scanner(System.in);
467         StringBuilder sb=new StringBuilder ();
468         String a[]=scan.nextLine().split(" ");
469         for(int i=0;i<a.length;i++)
470         {
471             int size=a[i].length();
472             if((size>3) && (a[i].endsWith("ing")))
473             {
474                 sb.append(a[i] +"ly" +" ");
475             }
476             else if(size>=3)
477             {
478                 sb.append(a[i] +"ing" +" ");
479             }
480             else
481             {
482                 sb.append(a[i] +" ");
483             }
484         }
485     }
486     System.out.println(sb);
487
488 }
489
490 }
```

```

491 output:
492 -----
493 I am mukesh studing cse
494 I am mukeshing studingly cseing
495 -----
496 Test6      SubString
497 -----
498
499 package HacerRankProblems;
500 import java.util.Scanner;
501 public class Test6SubString {
502
503     public static void main(String[] args) {
504         Scanner scan=new Scanner(System.in);
505         System.out.println("Enter String 1 :");
506         String a=scan.next();
507         System.out.println("Enter String 2 : ");
508         String b=scan.next();
509         if(a.contains(b))
510         {
511             System.out.println("The index is : "+a.indexOf(b));
512         }
513         else
514         {
515             System.out.println(-1);
516         }
517
518
519     }
520
521 }
522
523 output :
524 -----
525 Enter String 1 :

```

```
526 mukesh123cse
527 Enter String 2 :
528 cse
529 The index is : 9
530 -----
531 Test8 :   Palindromic Primes
532 *****
533 package HacerRankProblems;
534
535 import java.util.Scanner;
536
537 class PaliPrime
538 {
539     boolean Palindrom(String num)
540     {
541
542         String temp=num;
543         System.out.println("Now the temp value is : " +temp);
544         StringBuilder sb=new StringBuilder(temp);
545         String rev=sb.reverse().toString();
546         System.out.println("Reversed Number is : " +rev);
547         if(temp.equals(rev))
548             return true;
549         else
550             return false;
551
552
553
554     }
555     boolean prime(String num)
556     {
557         int n=Integer.parseInt(num);
558         boolean isprime=true;
559         for(int i=2;i<Math.sqrt(n);i++)
560         {
```



```
561         if(n%i==0)
562         {
563             isprime= false;
564         }
565     }
566     if(isprime)
567         return true;
568     else
569         return false;
570 }
571 }
572 public class Test7PalindromicPrime {
573
574     public static void main(String[] args)
575     {
576         Scanner scan=new Scanner(System.in);
577         System.out.print("Enter the Number : ");
578         String num=scan.next();
579         PaliPrime pp=new PaliPrime();
580         boolean b=pp.Palindrom(num);
581         System.out.println("palindrom : " +b);
582         boolean b1=pp.prime(num);
583         System.out.println("prime : " +b1);
584         if(pp.Palindrom(num) && pp.prime(num))
585             System.out.println("The number is palindrome prime");
586         else
587             System.out.println("No it's not a pali prime");
588
589     }
590
591 }
592 output is :
593 -----
594 Enter the Number : 11
595 Now the temp value is : 11
```

```
596 Reversed Number is : 11
597 palindrom : true
598 prime : true
599 Now the temp value is : 11
600 Reversed Number is : 11
601 The number is palindrome prime
602
603 Enter the Number : 10
604 Now the temp value is : 10
605 Reversed Number is : 01
606 palindrom : false
607 prime : false
608 Now the temp value is : 10
609 Reversed Number is : 01
610 No it's not a pali prime
611 -----
612 Test9 :      Consonents:
613 -----
614 package HacerRankProblems;
615
616 import java.util.Scanner;
617
618 public class Test9Consonents {
619
620     public static void main(String[] args) {
621         Scanner scan=new Scanner(System.in);
622         System.out.println("Enter the String : ");
623         String a=scan.next();
624         char b[]=a.toCharArray();
625         if(a.contains("aeiou"))
626         {
627             System.out.println(-1);
628         }
629         else
630         {
```

```
665     int size=scan.nextInt();
```

```

666     int a[]=new int[size];
667     System.out.print("Enter the element side by side : ");
668     for(int i=0;i<size;i++)
669     {
670         a[i]=scan.nextInt();
671     }
672     Arrays.sort(a);
673     System.out.println("The second Largest number in array is : " +a[size-2]);
674
675
676
677
678 }
679
680 }

```

```

681
682 OUTPUT:-
683 -----
684 Enter the array size : 5
685 Enter the element side by side : 1 2 3 4 5
686 The second Largest number in array is : 4

```

```

687 -----
688 Test10 :      PureNumber: module by 3
689 *****      *****
690
691 package HacerRankProblems;
692
693 import java.util.Scanner;
694
695 public class Test10PureNumber {
696
697     public static void main(String[] args) {
698         Scanner scan=new Scanner(System.in);
699         System.out.print("Enter the Number : ");
700         int num=scan.nextInt();

```

```
701     int sum=0;
702     int r;
703     while(num!=0)
704     {
705         r=num%10;
706         sum+=r;
707         num=num/10;
708     }
709     System.out.println("The sum of given number is : " +sum);
710     if(sum%3==0)
711     {
712         System.out.println("yes");
713     }
714     else
715     {
716         System.out.println("not");
717     }
718 }
719
720 }
```

```
721
722 Output:-
723 -----
724 Enter the Number : 15
725 The sum of given number is : 6
726 yes
727 -----
728
729
730
731
732
733
734
735
```

736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750