

```

1 public class Replace all 0s to 1s in an array
2 {
3     //StartOfMainMethod
4     public static void main(String[] args)
5     {
6         int[] a=
7         {
8             1,0,1,0,1,0,1,0
9         }
10        ;
11        replace(a);
12    }
13    //EndOfMainMethod
14    private static void replace(int[] a)
15    {
16        for(int i=0; i<a.length; i++)
17        {
18            a[i]=1;
19            System.out.print(a[i]+" ");
20        }
21    }
22 }

```

23
24 output 11111111

25 -----

```

26
27 public class find Max element
28 {
29     //StartOfMainMethod
30     public static void main(String[] args)
31     {
32         int[] a=
33         {
34             1,4,2,5,7,5,8,9
35         }
36         ;
37         myCode(a);
38     }
39     //EndOfMainMethod
40     public static void myCode(int[]a)
41     {
42         int max=0;
43         for(int i=0; i<a.length; i++)
44         {
45             if(a[i]>max)
46                 max=a[i];
47         }
48         System.out.println(max);
49     }
50 }
51 output = 9;

```

52 -----

```

53 public class Min Element
54 {
55     //StartOfMainMethod
56     public static void main(String[] args)
57     {
58         int[] a=
59         {
60             1,4,2,5,7,5,8,9
61         }
62         ;
63         myCode(a);
64     }
65     //EndOfMainMethod
66     public static void myCode(int[]a)
67     {

```

```

68         int min=Integer.MAX_VALUE;
69         for(int i=0; i<a.length; i++)
70         {
71             if(a[i]<min)
72             {
73                 min=a[i];
74             }
75         }
76         System.out.println("min "+min);
77     }
78 }
79 output min 1

```

```

81
82 public class Print Array
83 {
84     //StartOfMainMethod
85     public static void main(String[] args)
86     {
87         int[] a=
88         {
89             3,5,4,2,6,8,7,5,1,9
90         }
91         ;
92         myCode(a);
93     }
94     //EndOfMainMethod
95     public static void myCode(int[]a)
96     {
97         for(int i=0; i<a.length; i++)
98         {
99             System.out.print(a[i]+" ");
100         }
101     }
102     }optput    ; 3 5 4 2 6 8 7 5 1 9

```

```

104
105 public class Basic sort
106 {
107     //StartOfMainMethod
108     public static void main(String[] args)
109     {
110         int[] a=
111         {
112             33,78,90,20,5,50,40
113         }
114         ;
115         myCode(a);
116     }
117     //EndOfMainMethod
118     private static void myCode(int[] a)
119     {
120         int temp=0;
121         for(int i=0; i<a.length; i++)
122         {
123             for(int j=0; j<a.length-1;j++)
124             {
125                 if(a[j]>a[j+1])
126                 {
127                     temp=a[j];
128                     a[j]=a[j+1];
129                     a[j+1]=temp;
130                 }
131             }
132         }
133         for(int i=0; i<a.length; i++)
134         {

```

```

135         System.out.print(a[i]+" ");
136     }
137 }
138 output 5 20 33 40 50 78 90
139 -----
140 public class Addition Matrix
141 {
142     //StartOfMainMethod
143     public static void main(String[] args)
144     {
145         int[][] a=
146         {
147             {
148                 1,2,3
149             }
150             ,
151             {
152                 4,5,6
153             }
154             ,
155             {
156                 7,8,9
157             }
158         }
159         ;
160         int[][] b=
161         {
162             {
163                 1,2,3
164             }
165             ,
166             {
167                 4,5,6
168             }
169             ,
170             {
171                 7,8,9
172             }
173         }
174         ;
175         int[][] c=new int[a.length][a[0].length];
176         add(a,b,c);
177     }
178     //EndOfMainMethod
179     private static void add(int[][] a, int[][] b, int[][] c)
180     {
181         for(int i=0; i<a.length; i++)
182         {
183             for(int j=0; j<a[i].length; j++)
184             {
185                 c[i][j]=a[i][j]+b[i][j];
186             }
187         }
188         for(int i=0; i<a.length; i++)
189         {
190             for(int j=0; j<c.length; j++)
191             {
192                 System.out.print(c[i][j]+" ");
193             }
194             System.out.println();
195         }
196     }
197     output ;
198         2 4 6
199         8 10 12
200         14 16 18
201 -----

```

```

202 public class max Element in matrix array
203 {
204     //StartOfMainMethod
205     public static void main(String[] args)
206     {
207         int[][] a=
208         {
209             {
210                 1,2,3
211             },
212             ,
213             {
214                 4,23,5
215             },
216             ,
217             {
218                 5,4,7
219             }
220         }
221         ;
222         myCode(a);
223     }
224     //EndOfMainMethod
225     private static void myCode(int[][] a)
226     {
227         int max=0;
228         for(int i=0; i<a.length; i++)
229         {
230             for(int j=0; j<a[i].length; j++)
231             {
232                 if(a[i][j]>max)
233                     max=a[i][j];
234             }
235         }
236         System.out.println("max "+max);
237     }
238 }
239 output max 23
240
241 -----
242 -----

```

```

242
243
244
245 public class transpose of matrix
246 {
247     //StartOfMainMethod
248     public static void main(String[] args)
249     {
250         int[][] a=
251         {
252             {
253                 1,52,3
254             },
255             ,
256             {
257                 4,23,5
258             },
259             ,
260             {
261                 5,4,52
262             }
263         }
264         ;
265         myCode(a);
266     }
267     //EndOfMainMethod
268     private static void myCode(int[][] a)
269     {

```

```

270         int [][]b=new int[a[0].length][a.length];
271         for(int i=0; i<a.length; i++)
272         {
273             for(int j=0; j<a.length; j++)
274             {
275                 b[i][j]=a[j][i];
276             }
277         }
278         for(int i=0; i<b.length; i++)
279         {
280             for(int j=0; j<b.length; j++)
281             {
282                 System.out.print(b[i][j]+" ");
283             }
284             System.out.println();
285         }
286     }
287 }

```

```

288     output
289     1 4 5
290     52 23 4
291     3 5 52
292 -----

```

```

293 public class sum and avg
294 {
295     //StartOfMainMethod
296     public static void main(String[] args)
297     {
298         int[] a=
299         {
300             1,2,3,4,5,6,7,8
301         }
302         ;
303         myCode(a);
304     }
305     //EndOfMainMethod
306     private static void myCode(int[] a)
307     {
308         double sum=0;
309         double avg=0;
310         for(int i=0; i<a.length; i++)
311         {
312             sum=sum+a[i];
313             avg=sum/a.length;
314         }
315         System.out.println(sum);
316         System.out.println(avg);
317     }
318 } output
319 36.0
320 4.5
321 -----

```

```

322 public class rEmove specific element
323 {
324     //StartOfMainMethod
325     public static void main(String[] args)
326     {
327         int[] a=
328         {
329             33,7,90,20,5,50,40
330         }
331         ;
332         int ele=78;
333         myCode(a,ele);
334     }
335     //EndOfMainMethod
336 }

```

```

337 private static void myCode(int[] a,int ele)
338 {
339     int cnt=0;
340     for(int i=0; i<a.length; i++)
341     {
342         if(a[i]==ele)
343         {
344             cnt++;
345         }
346     }
347     int []b=new int[a.length-cnt];
348     int j=0;
349     for(int i=0; i<a.length; i++)
350     {
351         if(a[i]!=ele)
352         {
353             b[j]=a[i];
354             j++;
355         }
356     }
357     for(int k=0; k<b.length; k++)
358     {
359         System.out.print(b[k]+" ");
360     }
361 }
362 }

```

```

363 output
364 33 7 90 20 5 50 40

```

```

365 -----

```

```

366
367 public class Remove_duplicate_unique_count
368 {
369     //StartOfMainMethod
370     public static void main(String[] args)
371     {
372         int[] a =
373         {
374             2,1,5,4,3,2,1,6,4,2
375         }
376         ;
377         myCode(a);
378     }
379     //EndOfMainMethod
380     private static void myCode(int[] a)
381     {
382         int unique=0;
383         for(int i=0; i<a.length; i++)
384         {
385             int cnt=0;
386             for(int j=0; j<i; j++)
387             {
388                 if(a[i]==a[j])
389                 {
390                     cnt++;
391                 }
392             }
393             if(cnt==0)
394                 unique++;
395         }
396         System.out.println("new length of array : "+unique);
397     }
398 }

```

```

399
400 output new length of array : 6

```

```

401 -----

```

```

402 public class MyClass
403 {

```

```

404 //StartOfMainMethod
405 public static void main(String[] args)
406 {
407     int[] a=
408     {
409         11,22,33,44,55,66,-77,88
410     }
411     ;
412     element(a);
413 }
414 //EndOfMainMethod
415 private static void element(int[] a)
416 {
417     int e=0;
418     int o=0;
419     int p=0;
420     int n=0;
421     for(int i=0; i<a.length; i++)
422     {
423         if(a[i]%2==0)
424         {
425             e++;
426         }
427         else
428         {
429             o++;
430         }
431     }
432     for(int i=0; i<a.length; i++)
433     {
434         if(a[i]>0)
435         {
436             p++;
437         }
438         else
439         {
440             n++;
441         }
442     }
443     System.out.println("Even Count "+e);
444     System.out.println("Odd CCount "+o);
445     System.out.println("Positive Count "+p);
446     System.out.println("Negative Count "+n);
447 }
448 }
449 output
450 Even Count 4
451 Odd CCount 4
452 Positive Count 7
453 Negative Count 1
454
455
456
457
458

```

```

-----
459 public class sum of diagonal elements of a matrix
460 {
461     //StartOfMainMethod
462     public static void main(String[] args)
463     {
464         int[][] a=
465         {
466             {
467                 5,1,3,
468             }
469             ,
470             {
471                 2,4,3

```

```

472         }
473         ,
474         {
475             4,3,2
476         }
477     }
478     ;
479     myCode(a);
480 }
481 //EndOfMainMethod
482 private static void myCode(int[][] a)
483 {
484     int sum=0;
485     for(int i=0; i<a.length; i++)
486     {
487         for(int j=0; j<a[i].length;j++)
488         {
489             if(j+i==a.length-1)//sum=sum+a[i][a.length-i-1]
490             {
491                 sum=sum+a[i][j];
492             }
493         }
494     }
495     System.out.println(sum);
496 }
497 }

```

output is 11

```

501
502 check the equality of two arrays
503
504 public class MyClass
505 {
506     //StartOfMainMethod
507     public static void main(String[] args)
508     {
509         int[] a=
510         {
511             1,2,3,4,5
512         }
513         ;
514         int[] b=
515         {
516             1,2,3,5,4
517         }
518         ;
519         myCode(a,b);
520     }
521     //EndOfMainMethod
522     private static void myCode(int[] a,int[] b)
523     {
524         if(a[i]!=b[i])
525         {
526             int cnt=0;
527             for(int i=0; i<a.length; i++)
528             {
529                 if(a.length!=b.length)
530                 {
531                     cnt++;
532                     break;
533                 }
534             }
535             if(cnt==0)
536                 System.out.println("same");
537             else
538                 System.out.println("not same");
539         }

```



```

540         else
541             System.out.println("not same");
542     }
543 }
544 output not same;
545
546 -----
547
548 interleaving of two array
549 public class
550 {
551     //StartOfMainMethod
552     public static void main(String[] args)
553     {
554         char[] a=
555         {
556             'a','b','c','d','e','f','g'
557         }
558         ;
559         char[] b=
560         {
561             'w','x','y','z'
562         }
563         ;
564         myCode(a,b);
565     }
566     //EndOfMainMethod
567     private static void myCode(char[] a,char[] b)
568     {
569         char []c=new char[a.length+b.length];
570         int index=0;
571         for(int i=0; i<c.length; i++)
572         {
573             if(i<a.length)
574                 c[index++]=a[i];
575             if(i<b.length)
576                 c[index++]=b[i];
577         }
578         for(int i=0; i<c.length; i++)
579             System.out.print(c[i]+" ");
580     }
581 }
582 output a w b x c y d z e f g
583
584 -----
585
586 Multiplication of matrix
587 public class MyClass
588 {
589     //StartOfMainMethod
590     public static void main(String[] args)
591     {
592         int[][] a=
593         {
594             {
595                 1,2
596             },
597             {
598                 3,4
599             },
600             {
601                 5,6
602             }
603         }
604         ;
605         int[][] b=

```

```

607     {
608         {
609             1,2,3
610         }
611         ,
612         {
613             4,5,6
614         }
615     }
616     ;
617     int[][] c=new int[a.length][b[0].length];
618     multi(a,b,c);
619 }
620 //EndOfMainMethod
621 private static void multi(int[][] a, int[][] b, int[][] c)
622 {
623     for(int i=0; i<c.length; i++)
624     {
625         for(int j=0; j<c[i].length; j++)
626         {
627             for(int k=0; k<b.length; k++)
628             {
629                 c[i][j]=c[i][j]+a[i][k]*b[k][j];
630             }
631         }
632     }
633     for(int i=0; i<c.length; i++)
634     {
635         for(int j=0; j<c[i].length; j++)
636         {
637             System.out.print(c[i][j]+" ");
638         }
639         System.out.println();
640     }
641 }
642 }
643 output
644 9 12 15
645 19 26 33
646 29 40 51
647 -----

```

```

648
649 array contains a specificvalue
650 public class MyClass
651 {
652     //StartOfMainMethod
653     public static void main(String[] args)
654     {
655         int[] a=
656         {
657             33,7,90,20,5,50,40
658         }
659         ;
660         int ele=7;
661         myCode(a,ele);
662     }
663     //EndOfMainMethod
664     private static void myCode(int[] a,int ele)
665     {
666         int cnt=0;
667         for(int i=0; i<a.length; i++)
668         {
669             if(a[i]==ele)
670             {
671                 System.out.println("found");
672                 cnt++;
673                 break;
674             }

```

```

675         }
676         if(cnt==0)
677             System.out.println("not found");
678     }
679 }
680 output
681 found
682 -----
683
684 public class reverse of an array using thirdvariable.
685 {
686     //StartOfMainMethod
687     public static void main(String[] args)
688     {
689         int[] a=
690         {
691             1,2,3,4,5,6,7,8
692         }
693         ;
694         myCode(a);
695     }
696     //EndOfMainMethod
697     private static void myCode(int[] a)
698     {
699         int i=0;
700         int j=a.length-1;
701         int c=0;
702         while(i<j)
703         {
704             c=a[i];
705             a[i]=a[j];
706             a[j]=c;
707             i++;
708             j--;
709         }
710         for(int k=0; k<a.length; k++)
711             System.out.print(a[k]+" ");
712     }
713 }
714 output
715 8 7 6 5 4 3 2 1
716 -----
717
718 public class rotate an array to the left
719 {
720     //StartOfMainMethod
721     public static void main(String[] args)
722     {
723         int[] a=
724         {
725             3,2,4,6,5,6,8
726         }
727         ;
728         myCode(a);
729     }
730     //EndOfMainMethod
731     private static void myCode(int[] a)
732     {
733         int temp=a[0];
734         for(int i=0; i<a.length-1; i++)
735         {
736             a[i]=a[i+1];
737         }
738         a[a.length-1]=temp;
739         for(int i=0; i<a.length; i++)
740         {
741             System.out.print(a[i]+" ");

```

```

742     }
743 }
744 }
745 output 2 4 6 5 6 8 3
746
747 public class rotate an array to the right
748 {
749     //StartOfMainMethod
750     public static void main(String[] args)
751     {
752         int[] a=
753         {
754             3,2,4,6,5,6,8
755         }
756         ;
757         myCode(a);
758     }
759     //EndOfMainMethod
760     private static void myCode(int[] a)
761     {
762         int temp=a[a.length-1];
763         for(int i=a.length-1; i>0; i--)
764         {
765             a[i]=a[i-1];
766         }
767         a[0]=temp;
768         for(int i=0; i<a.length; i++)
769         {
770             System.out.print(a[i]+" ");
771         }
772     }
773 }output 8 3 2 4 6 5 6
774 -----

```

```

775 public class Min elementin array
776 {
777     //StartOfMainMethod
778     public static void main(String[] args)
779     {
780         int[] a=
781         {
782             1,4,2,5,7,5,8,9
783         }
784         ;
785         myCode(a);
786     }
787     //EndOfMainMethod
788     public static void myCode(int[]a)
789     {
790         int min=Integer.MAX_VALUE;
791         for(int i=0; i<a.length; i++)
792         {
793             if(a[i]<min)
794                 min=a[i];
795         }
796         System.out.println(min);
797     }
798 }
799 output 1
800 -----

```

```

802
803 public class find sum and avg of non digonal element of array
804 {
805     //StartOfMainMethod
806     public static void main(String[] args)
807     {
808         int[][] a=

```

```

809     {
810         {
811             1,12,3,4
812         }
813         ,
814         {
815             5,6,6,8
816         }
817         ,
818         {
819             9,1,2,5
820         }
821         ,
822         {
823             7,2,4,45
824         }
825     }
826     ;
827     myCode(a);
828 }
829 //EndOfMainMethod
830 private static void myCode(int[][] a)
831 {
832     double sum=0;
833     int cnt=0;
834     for(int i=0; i<a.length; i++)
835     {
836         for(int j=0; j<a[i].length; j++)
837         {
838             if(j+i!=a.length-1 && j-i!=0)
839             {
840                 sum=sum+a[i][j];
841                 cnt++;
842             }
843         }
844     }
845     double avg=sum/cnt;
846     System.out.println(sum);
847     System.out.println(avg);
848 }
849 }
850 output
851 48.0
852 6.0
853 -----
854 -----

```

```

854
855
856 public class Basic sort
857 {
858     //StartOfMainMethod
859     public static void main(String[] args)
860     {
861         int[] a=
862         {
863             33,78,90,20,5,50,40
864         }
865         ;
866         myCode(a);
867     }
868     //EndOfMainMethod
869     private static void myCode(int[] a)
870     {
871         for(int i=0; i<a.length; i++)
872         {
873             for(int j=i+1;j<a.length; j++)
874             {
875                 if(a[i]>a[j])
876                 {

```

```

877             int temp=a[i];
878             a[i]=a[j];
879             a[j]=temp;
880         }
881     }
882 }
883 print(a);
884 }
885 private static void print(int []a)
886 {
887     for(int i=0; i<a.length; i++)
888     {
889         System.out.print(a[i]+" ");
890     }
891 }
892 } optput 5 20 33 40 50 78 90
893 -----

```

```

894
895
896 public class find the index of an arrayelement
897 {
898     //StartOfMainMethod
899     public static void main(String[] args)
900     {
901         int[] a=
902         {
903             1,6,2,3,4,5,6,7
904         }
905         ;
906         int ele=6;
907         myCode(a,ele);
908     }
909     //EndOfMainMethod
910     private static void myCode(int[] a,int ele)
911     {
912         int cnt=0;
913         for(int i=0; i<a.length; i++)
914         {
915             if(a[i]==ele)
916             {
917                 System.out.println(i);
918                 cnt++;
919             }
920         }
921         if(cnt==0)
922             System.out.println("not found");
923     }
924 }
925 output 1
926 6
927 -----

```

```

928 public class remove a specific element from anarray
929 {
930     //StartOfMainMethod
931     public static void main(String[] args)
932     {
933         int[] a=
934         {
935             33,7,90,20,5,50,40
936         }
937         ;
938         int ele=78;
939         myCode(a,ele);
940     }
941     //EndOfMainMethod
942     private static void myCode(int[] a,int ele)
943     {

```

```
944         int cnt=0;
945         for(int i=0; i<a.length; i++)
946         {
947             if(a[i]==ele)
948             {
949                 cnt++;
950             }
951         }
952         if(cnt==0)
953             System.out.println("not found");
954         else
955             System.out.println("found");
956     }
957 }
958 output
959 not found
960 -----
-----
```