1) Playing with Number

```
static int[] shiftArray(int input1, int[] input2, int input3)
	{
		int ar[]=new int[input2.length];
		int j=0;
		for(int i=input3;i<input2.length;i++)
		{
			ar[j++]=input2[i];
		}
		for(int i=0; i<input3;i++)
		{
			ar[j++]=input2[i];
		}
		return ar;
	}
```

Test cases

```
input1=7;
input2[]= {1,2,3,4,5,6,7};
input3=2;
```

output:

```
3 4 5 6 7 1 2
```

2) Array Sort(nick checks)

```
private static int getCount(int input1, int[] input2)
	{
		int ar[]=new int[input2.length];
		for(int i =0;i<input2.length;i++)
		{
			ar[i]=input2[i];
		}
		Arrays.sort(ar);
		int num=ar[0];
		for(int i=0;i<input2.length;i++)
		{
			if(ar[i]!=num)
				return 0;
			num++;
		}

		return 1;
	}
```

Test Case:

input1:6

input2[]: {3,7,2,5,4,6}

output:

1

3) Fancy Occurrence

```
private static String fancyOcc(String input1, String input2)
	{
		String s="";
		char com=input2.charAt(0);
		for(int i= 0; i<input1.length();i++)
		{
			char ch=input1.charAt(i);
			if(ch!=com)
				s=s+ch;


		}
		return s;
	}
```

Test Case:

input1:Welcome to metti

input2:i

output:

Welcome to mett

4) String Within String

```
private static String isPermutation(String input1,String input2)
	{
		input1=input1.toLowerCase();
		input2=input2.toLowerCase();
		int arr1[] = new int[26];
		int arr2[] = new int[26];
		for(int i=0; i<input1.length();i++)
		{
			char ch = input1.charAt(i);
			arr1[ch-97]++;
		}
		for(int i=0;i<input2.length();i++)
		{
			char ch1 = input2.charAt(i);
			arr2[ch1-97]++;
			if(arr1[ch1-97]<arr2[ch1-97])
				return "no";
		}
		return "yes";
	}
```

Test Case:

input1: abab

input2: ab

output:

yes

5) Palindrome

```
private static int isPalindrome(String input1)
	{
		int j = input1.length();
		for(int i=0;i<s.length()/2;i++)
		{
			char ch= input1.charAt(i);
			if(ch!= input1.charAt(j-1))
				return 0;
			j--;
		}
		 return 1;
	}
```

Test Case:

input1: level

output:

1

6) Max occurring character

```
private static String maxOccurance(String input1)
	{
		char[] c=new char[26];
		String s="";
		for(int i=0;i<input1.length();i++)
		{
			char ch= input1.charAt(i);
			c[ch-97]++;
		}
		int max=0;
		for(int i=1;i<26;i++)
		{
			if(c[max]<c[i])
				max=i;
		}
		for(int i=0;i<26;i++)
		{
			if(c[i]==c[max]&&i!=max)
				return "0";
		}
```

```
            return s+(char)(max+97);
      }
```

Test cases:

input1 : abcdd

output : d

7) Number Sum

```
private static int sum(int input1, int[] input2)
      {
            int max=input2[0];
            int min=input2[0];
            for(int i=1;i<input2.length;i++)
            {
                  if(max<input2[i])
                        max=input2[i];
                  if(min>input2[i])
                        min=input2[i];
            }
            return max+min;
      }
```

Test cases:

input 1: 7

input 2: { 7,2,6,15,54,10,23}

output : 56

8) Anagram

```
private static String isAnagarm (String input1,String input2)
      {
            int n1 = input1.length();
          int n2 = input2.length();
          if (n1 != n2)
              return "no";
          input1=input1.toUpperCase();
          input2=input2.toUpperCase();
          int a[]= new int[26];
          int a2[]= new int[26];
          for(int i=0;i<n1;i++)
          {
            char ch= input1.charAt(i);
            a[ch-65]++;
          }
          for(int i=0;i<n2;i++)
          {
            char ch= input2.charAt(i);
                  a2[ch-65]++;
          }

        for (int i = 0; i < 26; i++)
            if (a[i] != a2[i])
                return "no";
        return "yes";
      }
```

Test cases:

input1:build
input : dubli
output : yes

9) Coin Counts

```
private static int getcount(int input1)
	{
		int coin=0;
		while(input1!=0)
		{
			coin=coin+(input1*input1);
			input1--;
		}
		return coin;
	}
```

Test cases:

input1 : 2

output : 5

10) Electro Static

```
private static int electroStatic(int[] input1, String input2, int
input3)
	{
		int sum=0;
		for(int i = 0;i<input3;i++)
		{
			char ch = input2.charAt(i);
			switch(ch)
			{
			case 'P':
				sum=sum+input1[i];
				break;
			case 'N':
				sum=sum-input1[i];
				break;
			}
		}
		return sum*100;
	}
```

Test cases:

input1 : {4,3,5}

input2 : PNP

input3 : 3

output : 600

11) Reverse Array

```
public static int[] reverseArray(int [] input1,int input2) {
                    int [] ars=new int[input2];
                    int k=0;
                    for(int i=input2-1;i>=0;i--)
                    {
                     ars[k]=input1[i];
                     k++;
                    }
                    return ars;
  }
```

Test cases:

input1 : {1 , 2 , 3 ,4, 5}

input2 : 5

output : 5 4 3 2 1

12) Modular equation

```
private static int isModule(int input1, int input2, int input3)
	{
		int rs=pow(input1,input2);
		return rs%input3;
	}

	private static int pow(int input1, int input2) {
		int fact=1;
		while(input2>0)
		{
		fact=fact * input1;
		input2--;
		}
		return fact;
	}
```

Test cases :

input1 : 2

input2 : 10

input3 : 1025

output : 1024

13) Remove duplicates from String

```
static String removeDuplicates(String input1)
        {
                String rs="";
                        char ch[]=input1.toCharArray();
                        for(int i=0;i<ch.length;i++)
                        {
                                if(rs.indexOf(ch[i])==-1)
                rs=rs+ch[i];
                        }
                        return rs;
        }
```

Test cases

input1 : geeksforgeeks

output : geksfor

14) Push zero to end

```
static void pushZerosToEnd(int input1[], int input2)
  {
     int count = 0;
     for (int i = 0; i < input2; i++)
        if (input1 [i] != 0)
           input1 [count++] = input1 [i];
     while (count < input2)
        input1 [count++] = 0;
  }
```

Test cases:

input1 : {1,0 ,2 ,5,0,6,0,0,9}

input2 : 9

output : 1 2 5 6 9 0 0 0 0

15) Cuckoo

```
static void cuckoo(int n)
  {
     int cuckoo1 = 0, cuckoo2 = 1;
     int counter = 0;
     int t=0;

     // Iterate till counter is n
     while (counter < n) {

        // Print the number

       t=cuckoo1;
        // Swap
        int cuckoo3 = cuckoo2 + 2*cuckoo1 +3*1;
        cuckoo1 = cuckoo2;
        cuckoo2 = cuckoo3;
        counter = counter + 1;
     }
     System.out.print(t + " ");
  }
```

Test cases

Input1 : 2

Output: 1

16) Remove Duplicats from array

```
public static int removeDuplicate(int input1[], int input2)
	{
		if(input2==0|| input2==1)
			return input2;

		int [] t=new int[input2];
		int j=0;
		for(int i=0;i<input2-1; i++)
		{
			if(input1[i]!=input1[i+1]) {
				t[j++]=input1[i];
			}
		}
		t[j++]=input1[input2-1];
		for(int i=0;i<j; i++)
		{
			input1[i]= t[i];
		}
		return j;
	}
```

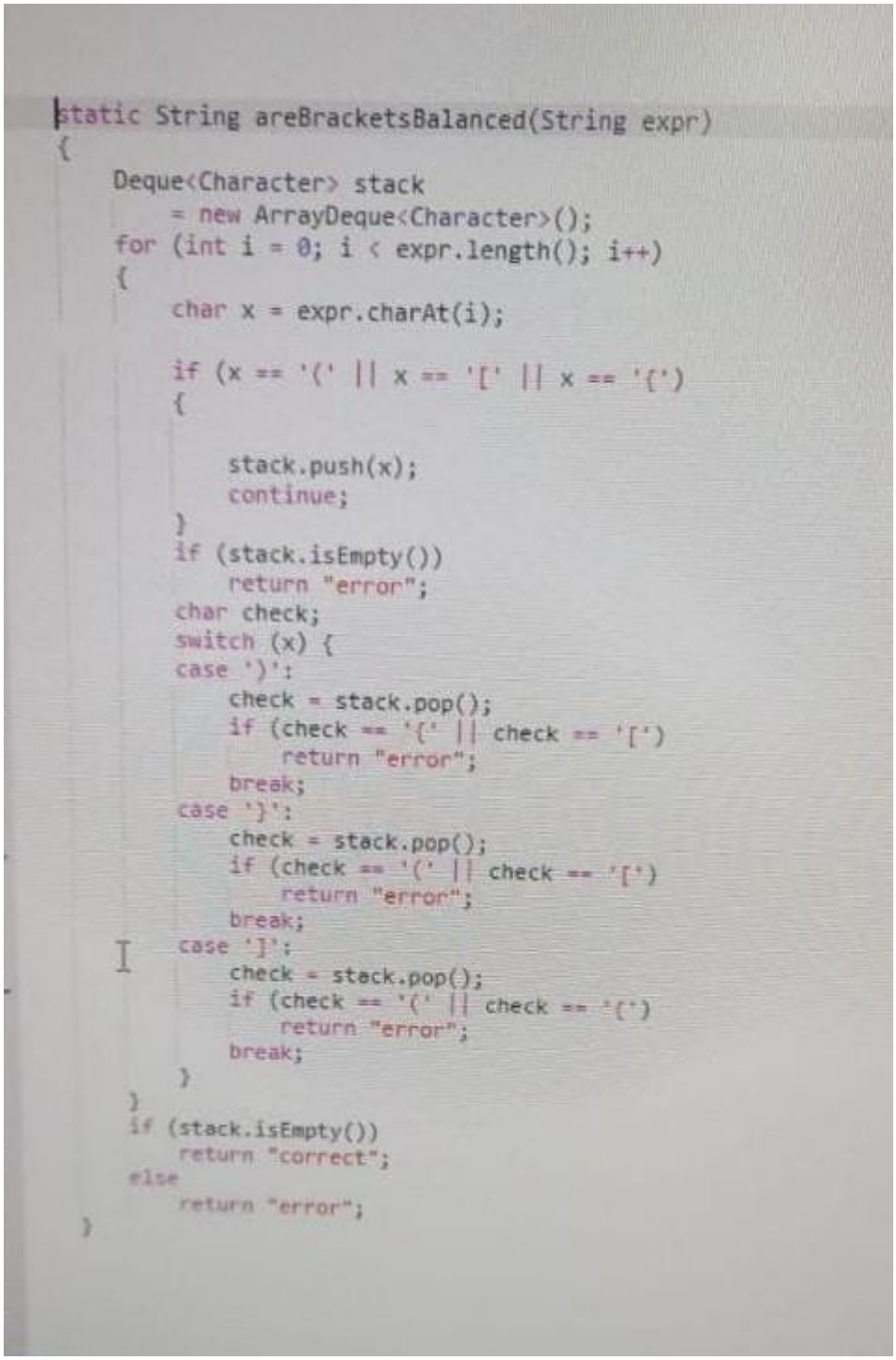
Test cases:

Input1: {1,2,2,11,11,11,15,6}

Input2 : 8

Output : 1 2 11 15 6

17) Missing Braces



```
static String areBracketsBalanced(String expr)
{
    Deque<Character> stack
        = new ArrayDeque<Character>();
    for (int i = 0; i < expr.length(); i++)
    {
        char x = expr.charAt(i);

        if (x == '(' || x == '[' || x == '{')
        {

            stack.push(x);
            continue;
        }
        if (stack.isEmpty())
            return "error";
        char check;
        switch (x) {
        case ')':
            check = stack.pop();
            if (check == '{' || check == '[')
                return "error";
            break;
        case '}':
            check = stack.pop();
            if (check == '(' || check == '[')
                return "error";
            break;
    I   case ']':
            check = stack.pop();
            if (check == '(' || check == '{')
                return "error";
            break;
        }
    }
    if (stack.isEmpty())
        return "correct";
    else
        return "error";
}
```