1.ARMSTRONG NUMBER:

```
package basics;

public class Armstrong {
	public static void main(String[] args) {
		int c = 0, a, temp;
		int n = 153;
		temp = n;
		while (n > 0) {
			a = n % 10;
			n = n / 10;
			c = c + (a * a * a);
		}
		if (temp == c)
			System.out.println("armstrong number");
		else
			System.out.println("Not armstrong number");
	}
}
```

o/p:

armstrong number

2.ASECNDING ORDER:

```
package basics;

import java.util.Scanner;

public class Ascending {
	public static void main(String[] args) {
		int n, temp;
		Scanner s = new Scanner(System.in);
		System.out.print("Enter no. of elements you want in array:");
		n = s.nextInt();
		int a[] = new int[n];
		System.out.println("Enter all the elements:");
		for (int i = 0; i < n; i++) {
			a[i] = s.nextInt();
		}
		for (int i = 0; i < n; i++) {
			for (int j = i + 1; j < n; j++) {
				if (a[i] > a[j]) {
					temp = a[i];
					a[i] = a[j];
					a[j] = temp;
				}
			}
		}
```

```
                System.out.print("Ascending Order:");
                for (int i = 0; i < n - 1; i++) {
                        System.out.print(a[i] + " ");
                }
                System.out.print(a[n - 1]);
        }
}
```

o/p:

```
Enter no. of elements you want in array:5
Enter all the elements:
1
2
3
4
5
Ascending Order:1 2 3 4 5
```

3.DESCENDING ORDER:

```
package basics;

import java.util.Scanner;

public class Ascending {
        public static void main(String[] args) {
                int n, temp;
                Scanner s = new Scanner(System.in);
                System.out.print("Enter no. of elements you want in array:");
                n = s.nextInt();
                int a[] = new int[n];
                System.out.println("Enter all the elements:");
                for (int i = 0; i < n; i++) {
                        a[i] = s.nextInt();
                }
                for (int i = 0; i < n; i++) {
                        for (int j = i + 1; j < n; j++) {
                                if (a[i] < a[j]) {
                                        temp = a[i];
                                        a[i] = a[j];
                                        a[j] = temp;
                                }
                        }
                }
                System.out.print("Descending Order:");
                for (int i = 0; i < n - 1; i++) {
                        System.out.print(a[i] + " ");
```

```
                }
                System.out.print(a[n - 1]);
        }
}
```

O/P:

```
Enter no. of elements you want in array:5
Enter all the elements:
1
2
3
4
5
Ascending Order:5 4 3 2 1
```

4.CHARACTER COUNT:

```
package basics;

import java.util.HashMap;

public class CharCount {
   public static void main(String[] args) {
      String line;
      int value;
      HashMap<Character,Integer> map = new HashMap<Character,Integer>();
      line = "Rajasekar Arunachalam";
      line = line.toLowerCase();
      for (int i=0; i<line.length(); i++){
         if(map.containsKey(line.charAt(i))){
            value = map.get(line.charAt(i));
            value ++;
            map.put(line.charAt(i),value);
         }else{
            map.put(line.charAt(i),1);
         }
      }
      for ( Character key : map.keySet()){
         System.out.println("Character : '"+key+"' Count :"+map.get(key));
      }
   }
}
```

O/P:

```
Character : ' ' Count :1
Character : 'a' Count :7
```

Character : 'c' Count :1
Character : 'e' Count :1
Character : 'h' Count :1
Character : 'j' Count :1
Character : 'k' Count :1
Character : 'l' Count :1
Character : 'm' Count :1
Character : 'n' Count :1
Character : 'r' Count :3
Character : 's' Count :1
Character : 'u' Count :1

5.FIBONACCI SERIES:

```
package basics;

public class Fibonacci {
	public static void main(String[] args) {
		int n, a = 0, b = 0, c = 1;
		n = 10;
		System.out.print("Fibonacci Series:");
		for (int i = 1; i <= n; i++) {
			a = b;
			b = c;
			c = a + b;
			System.out.print(a + " ");
		}
	}
}
```

O/P:
Fibonacci Series:0 1 1 2 3 5 8 13 21 34

6. LARGEST NUMBER

```
package basics;


import java.sql.Array;

import java.util.Arrays;


public class Largestnumber {

	public static int largestNumber(int[] a, int total) {

		// int temp;

		// for (int i = 0; i < total; i++) {
```

```
                // for (int j = i + 1; j < total; j++) {
                // if (a[i] < a[j]) {
                // temp = a[i];
                // a[i] = a[j];
                // a[j] = temp;
                // }
                // }
                // }
                Arrays.sort(a);
                return a[total - 1];
        }

        public static void main(String args[]) {
                int a[] = { 1, 2, 5, 6, 3, 2 };
                int b[] = { 44, 66, 99, 77, 33, 22, 55 };
                System.out.println("Second Largest: " + largestNumber(a, 6));
                System.out.println("Second Largest: " + largestNumber(b, 7));
        }
}
```

o/p:

Second Largest: 6
Second Largest: 99

7.NUMBER PALINDROME:

```
package basics;


public class Numberpalindrome {
        public static void main(String[] args) {

                int givennumber = 121;
                int number = givennumber;
                int reverse = 0;

                while (number > 0) {
```

```
                int remainder = number % 10;
                reverse = reverse * 10 + remainder;
                number = number / 10;
            }

            if (givennumber == reverse) {
                System.out.println("Result:Palindrome");
            } else {
                System.out.println("Result:Not Palindrome");
            }
        }

}
```

O/P:

Result:Palindrome

8.NUMBER REVERSE:

```
package basics;

public class Numberrev {
    public static void main(String args[]) {

        int num, reversenum = 0;
        num = 123456789;
        while (num > 0) {
            reversenum = reversenum * 10;
            reversenum = reversenum + num % 10;
            num = num / 10;
        }

        System.out.println("Reverse of input number is: " + reversenum);
    }

}
```

O/P:

Reverse of input number is: 987654321

9.PRIME NUMBER:

```
package basics;

public class PrimeExample {
	public static void main(String args[]) {

		int i = 0;
		int num = 0;
		String primeNumbers = "";

		for (i = 1; i <= 100; i++) {
			int counter = 0;
			for (num = i; num >= 1; num--) {
				if (i % num == 0) {
					counter = counter + 1;
				}
			}
			if (counter == 2) {
				primeNumbers = primeNumbers + i + " ";
			}
		}
		System.out.println("Prime numbers from 1 to 100 are :");
		System.out.println(primeNumbers);
	}
}
```

O/P:

```
Prime numbers from 1 to 100 are :
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97
```

10.STRING PALINDROME:

```
package basics;

public class Stringpalindrome {
	public static void main(String[] args) {


		String str="racecar";
		String revstring="";

		for(int i=str.length()-1;i>=0;--i){
		revstring =revstring + str.charAt(i);
		}

		System.out.println(revstring);

		if(revstring.equalsIgnoreCase(str)){
```

```
        System.out.println("The string is Palindrome");
        }
        else{
        System.out.println("Not Palindrome");
        }

        }
        }
```

O/P:

The string is Palindrome

11.STRING REVERSE:

```
package basics;


public class StringReverse {
        public static void main(String[] args) {
                String list = "rajasekar";
                for (int i = list.length()-1; i >=0; i--) {
                        char string = list.charAt(i);
                System.out.print(string);
                }


        }
}
```

O/P:

Rakesajar

12.UPPER CASE, LOWER CASE, DIGITS & SPECIAL CHAR COUNT:

```
package basics;

import org.openqa.selenium.WebDriver;

public class vowelCount {
        static WebDriver driver;

        public static void main(String[] args) {
                String line = "This weBsite Is Awesom3#$#$#$%%";
                String  num = "" ;
                int vowels = 0, consonants = 0, digits = 0, spaces = 0, sc = 0;
                for (int i = 0; i < line.length(); ++i) {
                        char ch = line.charAt(i);
                        if ((ch >= 'A' && ch <= 'Z')) {
                                ++vowels;
```

```
                        num = num + line.charAt(i);
                        System.out.print(num);
                    }
                    else if ((ch >= 'a' && ch <= 'z')) {
                        ++consonants;
//                      Character.isLowerCase(ch);
//                      System.out.print(ch);
                    } else if (ch >= '0' && ch <= '9') {
                        ++digits;
//                      Character.isDigit(ch);
//                      System.out.print(ch);
                    } else if (ch <= ' ') {
                        ++spaces;
//                      Character.isWhitespace(ch);
//                      System.out.print(ch);
                    } else if (ch >= '!' && ch <= '*') {
                        ++sc;
                    }

                }

                System.out.println("uppercase:" + vowels);
                System.out.println("Vowels: " + vowels);
                System.out.println("Consonants: " + consonants);
                System.out.println("Digits: " + digits);
                System.out.println("White spaces: " + spaces);

                System.out.println("special char:" + sc);
        }
}
```

O/P:

```
Vowels: 4
Consonants: 15
Digits: 1
White spaces: 3
special char:8
```

13.WORD COUNT:

```
package basics;

public class Wordcount
{
        public static void main(String args[])
        {
                String s = "welcome to candid java tutorial";
```

```
		int count = 1;

		for (int i = 0; i < s.length() - 1; i++)
		{
			if ((s.charAt(i) == ' ') && (s.charAt(i + 1) != ' '))
			{
				count++;

			}
		}
		System.out.println("Number of words in a string = " + count);
	}
}
```

O/P:

Number of words in a string = 5

14.WORD REVERSE:

```
package basics;

public class WordReverse {
	public void reverseWordInMyString(String str) {
		String[] words = str.split(" ");
		String reversedString = "";
		for (int i = 0; i < words.length; i++) {
			String word = words[i];
			String reverseWord = "";
			for (int j = word.length() - 1; j >= 0; j--) {
				reverseWord = reverseWord + word.charAt(j);
			}
			reversedString = reversedString + reverseWord + " ";
		}
		System.out.println(str);
		System.out.println(reversedString);
	}

	public static void main(String[] args) {
		WordReverse obj = new WordReverse();
		obj.reverseWordInMyString("Welcome to BeginnersBook");
		obj.reverseWordInMyString("This is an easy Java Program");
	}
}
```

O/P:

Welcome to BeginnersBook
emocleW ot kooBsrennigeB

This is an easy Java Program
sihT si na ysae avaJ margorP