Please find the subjective type of exam in core java eligibility test.

Conditional & Control Structure
==========
1.Find biggest/smallest number among 3 numbers
2.Find biggest/smallest number among 'N' numbers
3.Print the mathematical table of give number
4.Print the mathematical tables from 1 to 10
5.Find whether given number is prime number or not.
6.Print the prime numbers between 2 to 100
7.Print the factorial of given number
8.Print factorial of all the numbers between given range
10.Find whether the given number is palindrome or not.
11.Find whether the given number is Armstrong number or not.

String Operations
==========
1.Write a program to compare two Strings
2.Write a program to print the give string in reverse order
3.Write a program to find whether a give string is palindrome or not
4.Write a program to find number of words in given string
5.Write a program to display first character of each word in capital letter of given String
6.Write a program to find number of occurrence of each character in given string

Arrays - Single Dimension
==========
1.Read 'N' numbers and display the same
2.Find biggest and smallest number between given 'N' Numbers
3.Write a program to search whether given numbers is present or not using linear search
4.Write a program to search whether given numbers is present or not using binary search
5.Write a program to insert a number at the given position
6.Write a program to delete the given number from the array
7.Write a program to delete the number in a given position from the array
8.Write a program to count the duplicate number in a given array
9.Write program to remove all the duplicate numbers in a given array

10.Write a program to count occurrence of each number in a given array

Happy Appraisal

1.Find biggest/smallest number among 3 numbers

```
public class MaxMinNumber {
  public static void main(String[] args) {
     Scanner in = new Scanner(System.in);
     System.out.println("Enter first number: ");
     int n1 = in.nextInt();
     System.out.println("Enter second number: ");
     int n2 = in.nextInt();
     System.out.println("Enter third number: ");
     int n3 = in.nextInt();
     int largest = Math.max(n1, Math.max(n2, n3));
     System.out.println("Largest among (" + n1 + ", " + n2 + ", " + n3 + ") is: "
                                + largest);
     int smallest = Math.min(n1, Math.min(n2, n3));
     System.out.println("Smallest among (" + n1 + ", " + n2 + ", " + n3 + ") is: "
                                 + smallest);
     in.close();
  }
}
```

Find biggest/smallest number among 'N' numbers in java

```
import java.util.Scanner;

class numbers
```

```
{
  public static void main(String args[])
  {
    int x, y, z;
    System.out.println("Enter three integers ");
    Scanner in = new Scanner(System.in);

    x = in.nextInt();
    y = in.nextInt();
    z = in.nextInt();

    if ( x > y && x > z )
      System.out.println("First number is largest.");
    else if ( y > x && y > z )
      System.out.println("Second number is largest.");
    else if ( z > x && z > y )
      System.out.println("Third number is largest.");
    else
      System.out.println("Entered numbers are not distinct");
  }
}
```

2.Print the mathematical table of give number

```
1. import java.util.Scanner;
2. public class Multiplication_Table
3. {
4.     public static void main(String[] args)
5.     {
6.         Scanner s = new Scanner(System.in);
7.   System.out.print("Enter number:");
8.   int n=s.nextInt();
9.         for(int i=1; i <= 10; i++)
10.        {
11.            System.out.println(n+" * "+i+" = "+n*i);
12.        }
13.    }
14.}
```

3.Print the mathematical tables from 1 to 10

```
import java.util.Scanner;

class MultiplicationTable
{
  public static void main(String args[])
  {
    int n, c;
    System.out.println("Enter an integer to print it's multiplication table");
    Scanner in = new Scanner(System.in);
    n = in.nextInt();
    System.out.println("Multiplication table of "+n+" is :-");

    for ( c = 1 ; c <= 10 ; c++ )
      System.out.println(n+"*"+c+" = "+(n*c));
  }
}
```

4.Find whether given number is prime number or not

```
import java.util.Scanner;
class PrimeCheck
{
```

```
  public static void main(String args[])
  {
          int temp;
          boolean isPrime=true;
          Scanner scan= new Scanner(System.in);
          System.out.println("Enter any number:");
          //capture the input in an integer
          int num=scan.nextInt();
      scan.close();
          for(int i=2;i<=num/2;i++)
          {
         temp=num%i;
            if(temp==0)
            {
              isPrime=false;
              break;
            }
          }
          //If isPrime is true then the number is prime else not
          if(isPrime)
            System.out.println(num + " is a Prime Number");
          else
            System.out.println(num + " is not a Prime Number");
  }
}
```

5.Print the prime numbers between 2 to 100

```
class PrimeNumbers
{
  public static void main (String[] args)
  {
     int i =0;
     int num =0;
     //Empty String
     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)
            {
              //Appended the Prime number to the String
              primeNumbers = primeNumbers + i + " ";
            }
      }
      System.out.println("Prime numbers from 1 to 100 are :");
      System.out.println(primeNumbers);
   }
}
```

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```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;

class Prime {
    public static void main(String args[]) throws IOException {
        int n, count, c = 0;
        BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));
        System.out.println("Enter A Value : ");
        n = Integer.parseInt(br.readLine());
        System.out.println("Prime Numbers up to " + n);
        for (int i = 2; i <= n; i++) {
            count = 2;
            for (int j = 2; j < i; j++) {
                if (i % j == 0)
                    count++;
            }
            if (count == 2) {
                System.out.print(i + " ");
```

```
          c++;
        }
      }
    }
}
```

6.Print the factorial of given number

```
class FactorialExample{
 public static void main(String args[]){
  int i,fact=1;
  int number=5;//It is the number to calculate factorial
  for(i=1;i<=number;i++){
      fact=fact*i;
  }
  System.out.println("Factorial of "+number+" is: "+fact);
 }
}
```

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```
import java.util.Scanner;
class FactorialDemo{
   public static void main(String args[]){
      //Scanner object for capturing the user input
      Scanner scanner = new Scanner(System.in);
      System.out.println("Enter the number:");
      //Stored the entered value in variable
      int num = scanner.nextInt();
      //Called the user defined function fact
      int factorial = fact(num);
      System.out.println("Factorial of entered number is: "+factorial);
   }
   static int fact(int n)
   {
```

```
    int output;
    if(n==1){
      return 1;
    }
    //Recursion: Function calling itself!!
    output = fact(n-1)* n;
    return output;
  }
}
```

7.Print factorial of all the numbers between given range

```
import java.util.Scanner;

public class Factorial {

  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    System.out.print("Enter the number whose factorial is to be found: ");
    int n = scanner.nextInt();
    int result = factorial(n);
    System.out.println("The factorial of " + n + " is " + result);
  }

  public static int factorial(int n) {
    int result = 1;
    for (int i = 1; i <= n; i++) {
      result = result * i;
    }
    return result;
  }
}
```

Find whether the given number is palindrome or not.

```
1. class PalindromeExample{
2.  public static void main(String args[]){
3.   int r,sum=0,temp;
4.   int n=454;//It is the number variable to be checked for palindrome
5.
6.   temp=n;
7.   while(n>0){
8.    r=n%10;  //getting remainder
9.    sum=(sum*10)+r;
10.   n=n/10;
11.  }
12.  if(temp==sum)
13.   System.out.println("palindrome number ");
14.  else
15.   System.out.println("not palindrome");
16.}
17.}
```

Find whether the given number is Armstrong number or not.

```
1. class ArmstrongExample{
2.   public static void main(String[] args)  {
3.     int c=0,a,temp;
4.     int n=153;//It is the number to check armstrong
5.     temp=n;
6.     while(n>0)
7.     {
8.     a=n%10;
9.     n=n/10;
10.    c=c+(a*a*a);
11.    }
12.    if(temp==c)
13.    System.out.println("armstrong number");
```

```
14.    else
15.        System.out.println("Not armstrong number");
16.    }
17.}
```

String Operations

==========

1.Write a program to compare two Strings

```
import java.util.Scanner;

class CompareStrings
{
  public static void main(String args[])
  {
    String s1, s2;
    Scanner in = new Scanner(System.in);

    System.out.println("Enter the first string");
    s1 = in.nextLine();

    System.out.println("Enter the second string");
    s2 = in.nextLine();

    if ( s1.compareTo(s2) > 0 )
      System.out.println("First string is greater than second.");
    else if ( s1.compareTo(s2) < 0 )
      System.out.println("First string is smaller than second.");
```

```
    else
      System.out.println("Both strings are equal.");
  }
}
```

Write a program to print the give string in reverse order

```
import java.util.*;

class ReverseString
{
  public static void main(String args[])
  {
    String original, reverse = "";
    Scanner in = new Scanner(System.in);

    System.out.println("Enter a string to reverse");
    original = in.nextLine();

    int length = original.length();

    for ( int i = length - 1 ; i >= 0 ; i-- )
      reverse = reverse + original.charAt(i);

    System.out.println("Reverse of entered string is: "+reverse);
  }
}
```

Write a program to find whether a give string is palindrome or not

```
import java.util.*;

class Palindrome
{
  public static void main(String args[])
  {
    String original, reverse = ""; // Objects of String class
    Scanner in = new Scanner(System.in);

    System.out.println("Enter a string to check if it is a palindrome");
    original = in.nextLine();

    int length = original.length();

    for ( int i = length - 1; i >= 0; i-- )
      reverse = reverse + original.charAt(i);

    if (original.equals(reverse))
      System.out.println("Entered string is a palindrome.");
    else
      System.out.println("Entered string is not a palindrome.");

  }
}
```

Write a program to find number of words in given string

```
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);
        }
}
```

Write a program to display first character of each word in capital letter of given String

```
public class FirstLetterCapital
{
   public static void main(String args[])
   {
      Scanner ob=new Scanner(System.in);
      System.out.println("Enter the sentence.");
      String s=ob.nextLine();

      s=" "+s;
```

```
        String cap="";
        for(int i=0;i<s.length();i++)
        {
           char x=s.charAt(i);
           if(x==' ')
           {
              cap=cap+" ";
              char y=s.charAt(i+1);
              cap=cap+Character.toUpperCase(y);
              i++;
           }
           else
           {
              cap=cap+x;
           }
        }
        System.out.println("The new String with capital letters is: "+"\n"+cap);
     }
}
```

Write a program to find number of occurrence of each character in given string

```
   import java.util.Scanner;
2  public class CountCharacters {
3
4     public static void main(String[] args) {
5        Scanner sc = new Scanner(System.in);
6        System.out.println("Enter a String");
7        String s = sc.next().toLowerCase();
8        System.out.println("Enter a character to count in the string " + s);
9        char c = sc.next(".").toLowerCase().charAt(0); // This logic is to read
10                                                      // only one character
11       int cn = 0;
12       for (char cc : s.toCharArray()) {
13          if (c == cc) {
14             cn++;
15          }
16       }
17       System.out.println(c + " occurs " + cn + " times in " + s);
```

```
        sc.close();
    }
}
```