

Assignment-10

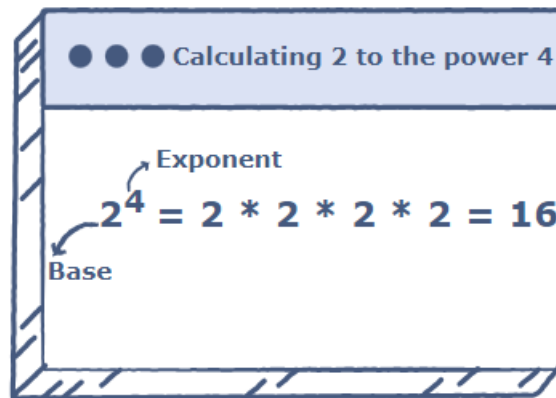
30/08/2023

Assignment-1:

1) Usage of pow() present in Math class?

- > The **Math.pow()** is an built-in method in Java **Math** class and is used to calculate the power of a given number.

The **power** of a number refers to how many times to multiply the number with itself.



Example:

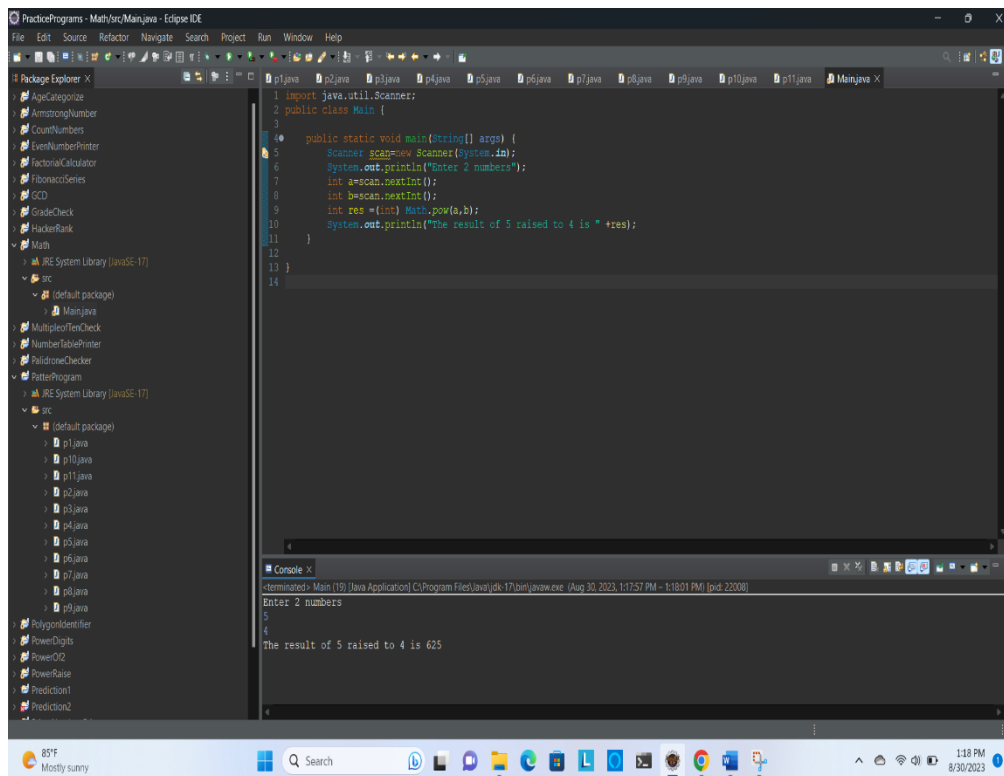


Fig:eg for pow()in Math

2) Complete description of random() ?

→ The **java.lang.Math.random()** method returns a pseudorandom double type number greater than or equal to 0.0 and less than 1.0. When this method is first called, it creates a single new pseudorandom-number generator, exactly as if by the expression new **java.util.Random**.

Declaration:

```
public static double random()
```

Example:

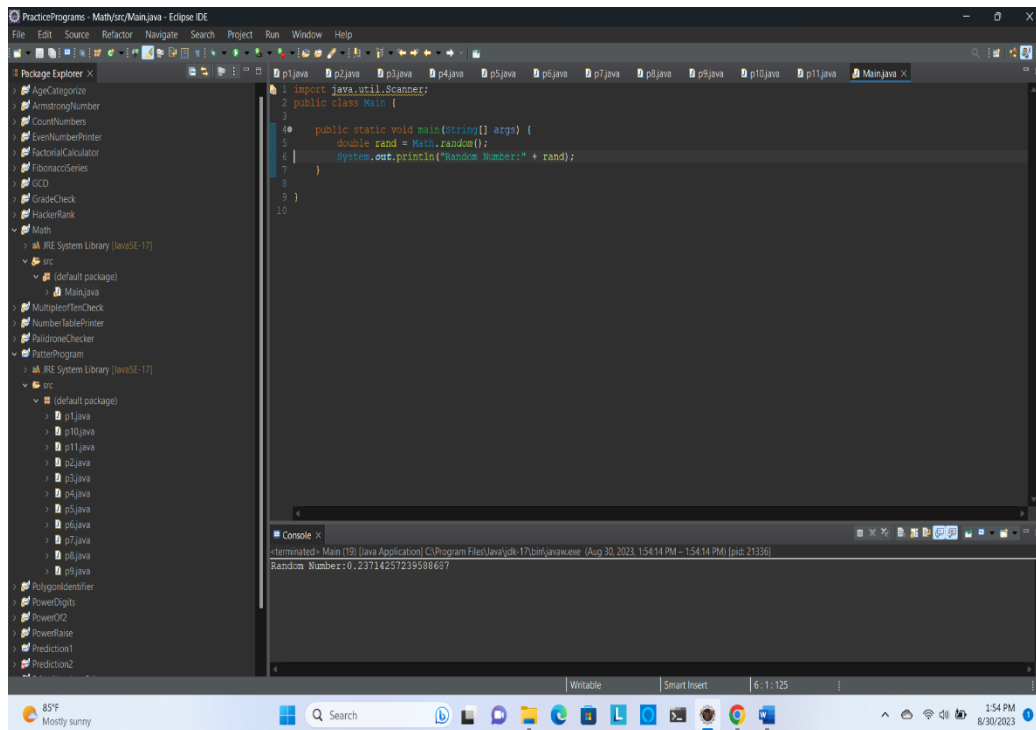


Fig: eg of random()

Assignment-2

1) What is the use of random class?

➔ Random class is part of java. util package. Random class is used to generate pseudo-random numbers in java. An instance of this class is thread-safe. The instance of this class is however cryptographically insecure.

This class provides various method calls to generate different random data types such as float, double, int.

Declaration:

```

public class Random
    extends Object
    implements Serializable

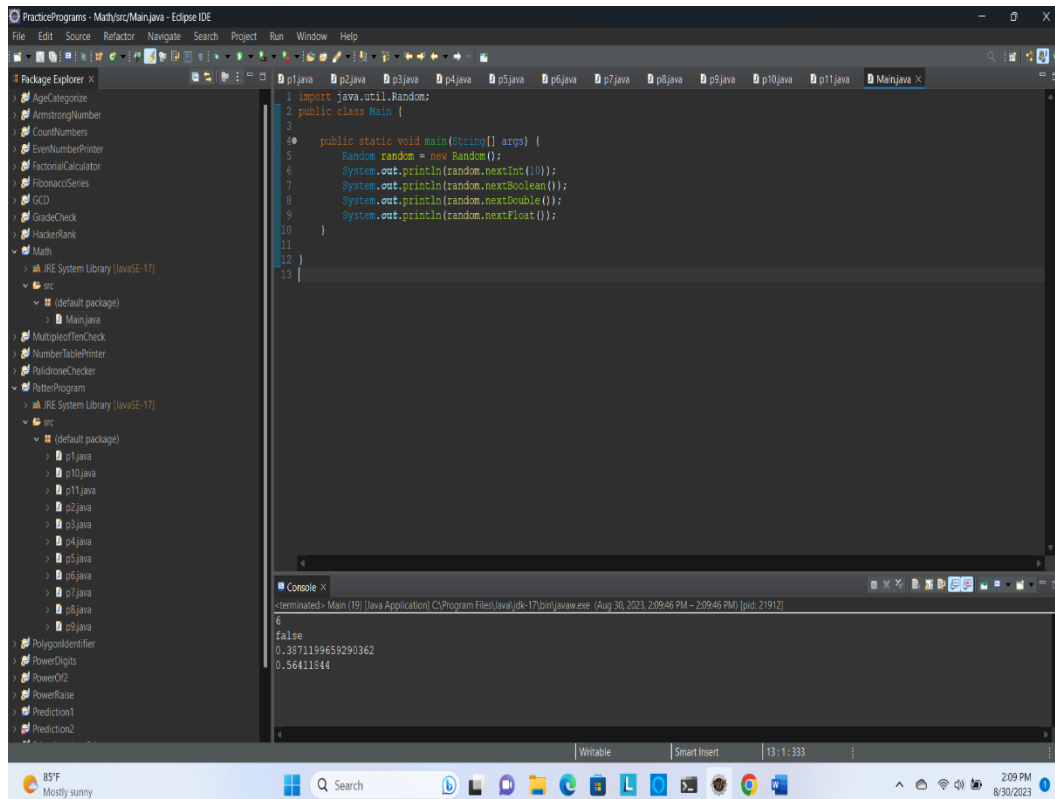
```

Methods:

There are several methods like,

- `java.util.Random.doubles()`:
 - `java.util.Random.ints()`:
 - `java.util.Random.longs()`:
 - `java.util.Random.nextBoolean()`:
- and so on.

Example:



```
1 import java.util.Random;
2 public class Main {
3
4     public static void main(String[] args) {
5         Random random = new Random();
6         System.out.println(random.nextInt(10));
7         System.out.println(random.nextBoolean());
8         System.out.println(random.nextDouble());
9         System.out.println(random.nextFloat());
10    }
11 }
12 }
13 }
```

Console Output:

```
terminated> Main (19) [Java Application] C:\Program Files\Java\jdk-17\bin\java.exe (Aug 30, 2023, 2:09:46 PM - 2:09:46 PM) [pid: 21912]
6
false
0.3871199659290362
0.56411844
```

Fig: eg for random package

**THANK YOU SIR
KEEP SMILING ALWAYS & MAKE OTHERS TO SMILE**

