Scopes in java

Local and Global

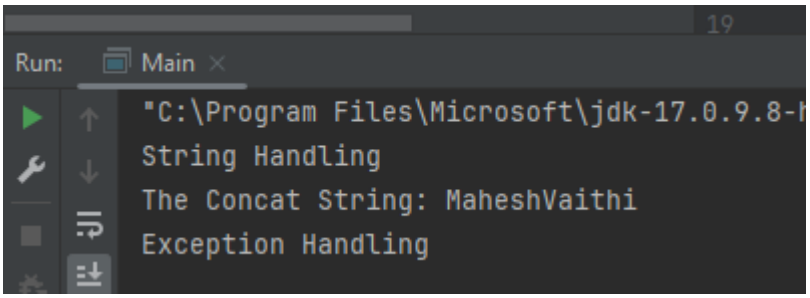
Access Modifiers in Java:

Public , Private and Protected

String Handling in Java:

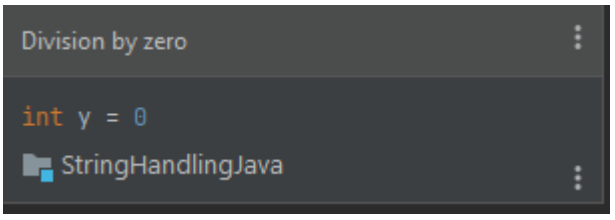
Refer an oracle string operations for inbuilt function

```
System.out.println("String Handling");
String a = "Mahesh";
String b = "Vaithi";

String c=a+b; //concat string

System.out.println("The Concat String: "+c);
```



Exception Handling

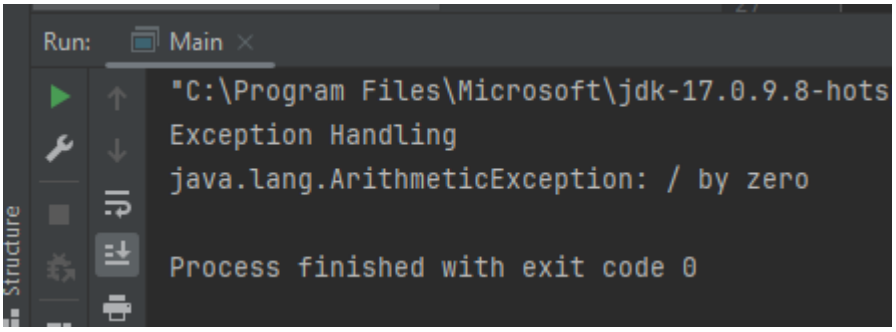
```
System.out.println("Exception Handling");

int x = 10;
int y = 0;

int res = x/y;
System.out.println("Result Of :"+res);
```



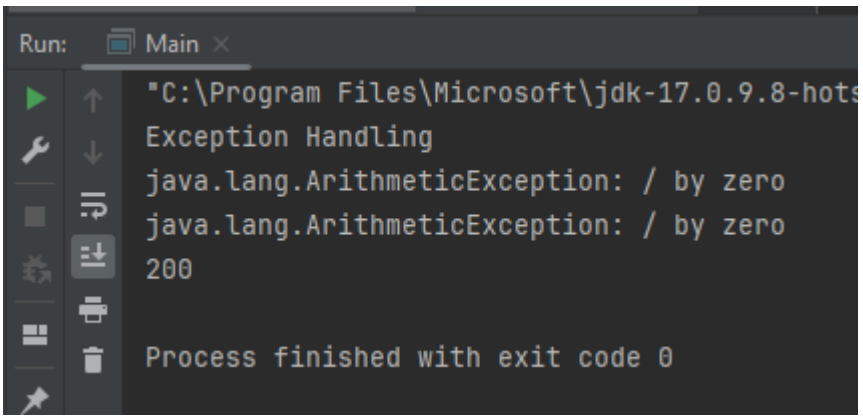
Divide by Zero exception

By Arithmetic exception:

```
System.out.println("Exception Handling");

int x = 10;
int y = 0;

try {

   int res = x / y;
   System.out.println("Result Of :"+res);
}
catch(ArithmeticException e) {
   System.out.println(e);
}
```




```
// Multiple Exception

int n1=200;
int n2=0;

try{

   int s = n1/n2;
   System.out.println("Result of: "+s);
}
catch (Exception e){

   System.out.println(e);
}
finally {
   System.out.println(n1);
}
```



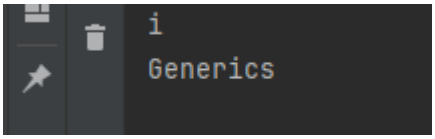
Parent exception should be under the child exception:

Exception - child
Arithmetic Exception - parent

Enums in Java

```
// Enum in java

Learning learning = Learning.GENERICS;

switch (learning){
   case COREJAVA -> System.out.println("Core JAVA");
   case COLLECTIONS -> System.out.println("Collections");
   case GENERICS -> System.out.println("Generics");
   case JSP -> System.out.println("JSP");
   case MULTITHREADING -> System.out.println("MultiThreading");
}
```

```
package org.example;

public enum Learning {
    COREJAVA,COLLECTIONS,GENERICS,JSP,MULTITHREADING

}
```

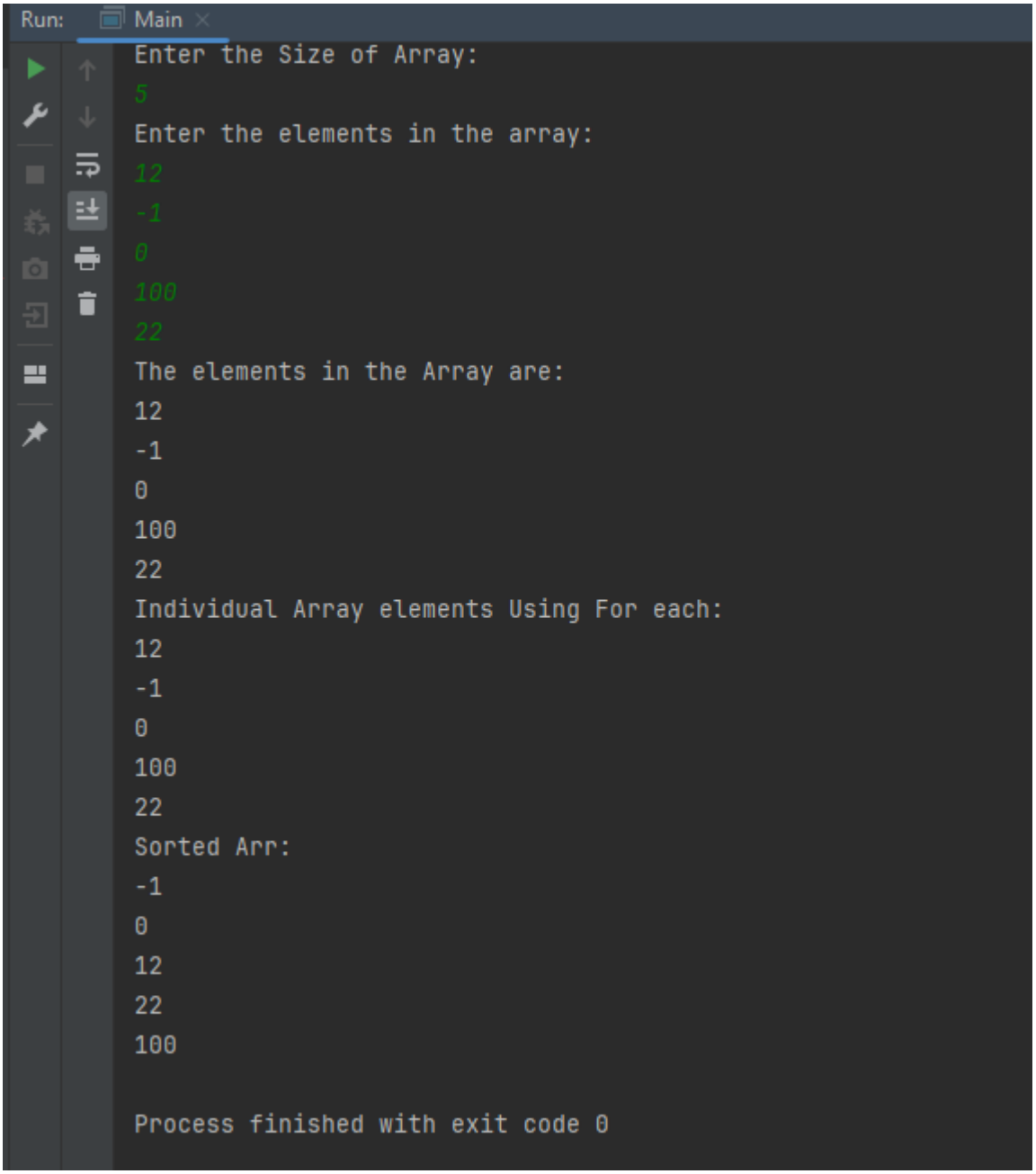


All Array Ops:

```
package org.example;
import java.util.*;
public class Main {
   public static void main(String[] args) {
```

```java
        // arrays in java
        // to print an array via user input

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the Size of Array: ");
        int size = sc.nextInt();
        int[] arr = new int[size];

        // to get user input for an array using for loop
        System.out.println("Enter the elements in the array: ");
        for(int i=0;i<size;i++){
             arr[i]= sc.nextInt();
        }
        // to print the array

        System.out.println("The elements in the Array are: ");

        for(int j=0;j<arr.length;j++){
            System.out.println(arr[j]);
        }

        // to print for each loop to print individual array

        System.out.println("Individual Array elements Using For each: ");

        for(int s : arr){
            System.out.println(s);
        }

        Main m = new Main();
        m.bsort(arr);



    }

    public void bsort(int[] arr){
        for(int i=0;i<arr.length;i++){
            for(int j=i+1;j< arr.length;j++){
                if(arr[i]>arr[j]){
                    //swap the arr
                    int temp = 0;
                      temp=arr[i];
                    arr[i]=arr[j];
                    arr[j]=temp;
                }
            }
        }
        System.out.println("Sorted Arr:");

        for(int a: arr){
            System.out.println(a);
        }
```

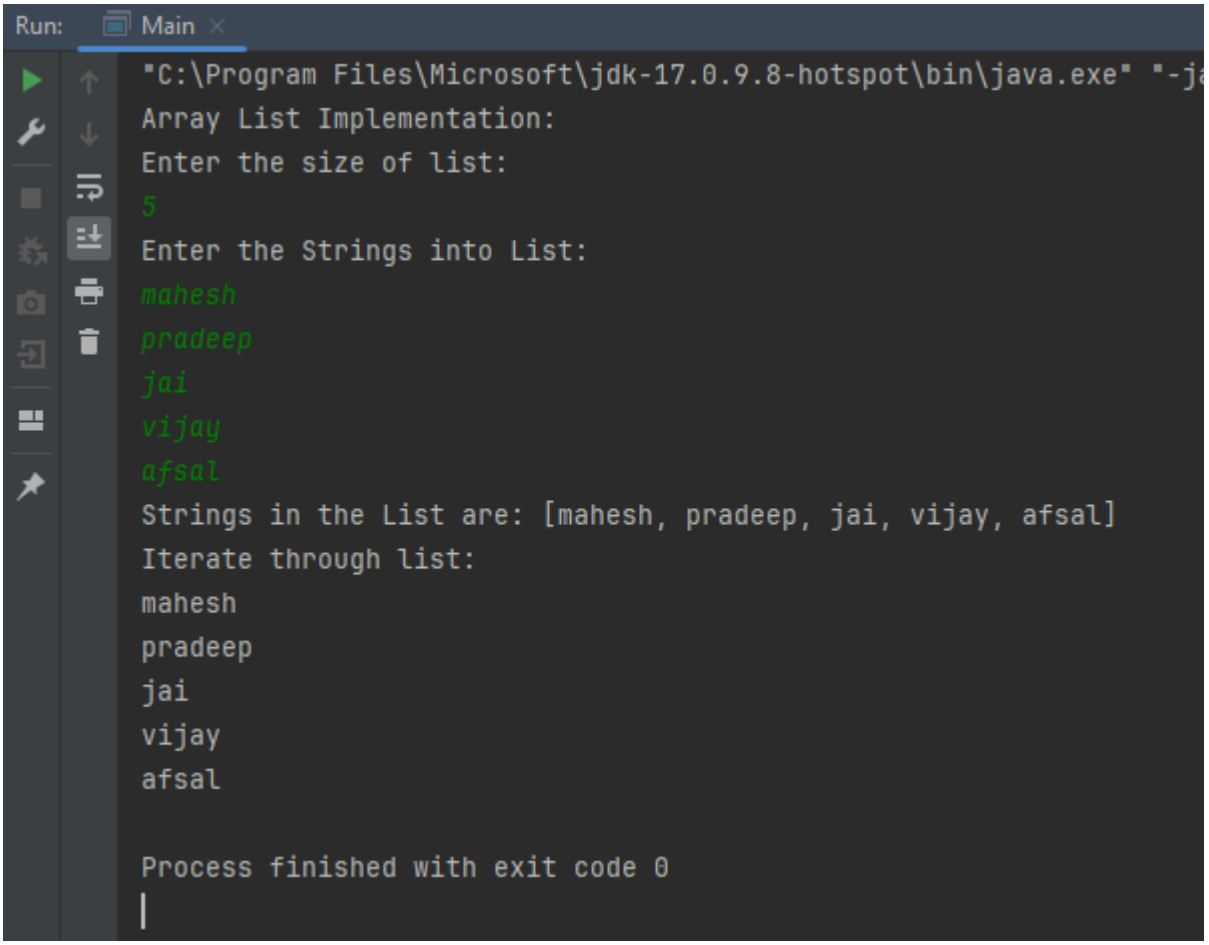
```
    }
}
```



Array Lists in Java

```
package org.example;
import java.util.*;
public class Main {
   public static void main(String[] args) {

       Scanner sc = new Scanner(System.in);
```

```
        // array list implementation

        System.out.println("Array List Implementation: ");

        System.out.println("Enter the size of list: ");

        int size = sc.nextInt();


        ArrayList<String> list = new java.util.ArrayList<java.lang.String>();

        System.out.println("Enter the Strings into List:");
        for(int i=0;i<size;i++){
            list.add(sc.next());
        }
        // to view the elements in the list
        System.out.println("Strings in the List are: "+list);

        //for each to view the list
        System.out.println("Iterate through list: ");
        for(String s : list){
            System.out.println(s);
        }









    }
}
```



Stack Linked List are refer code doc :

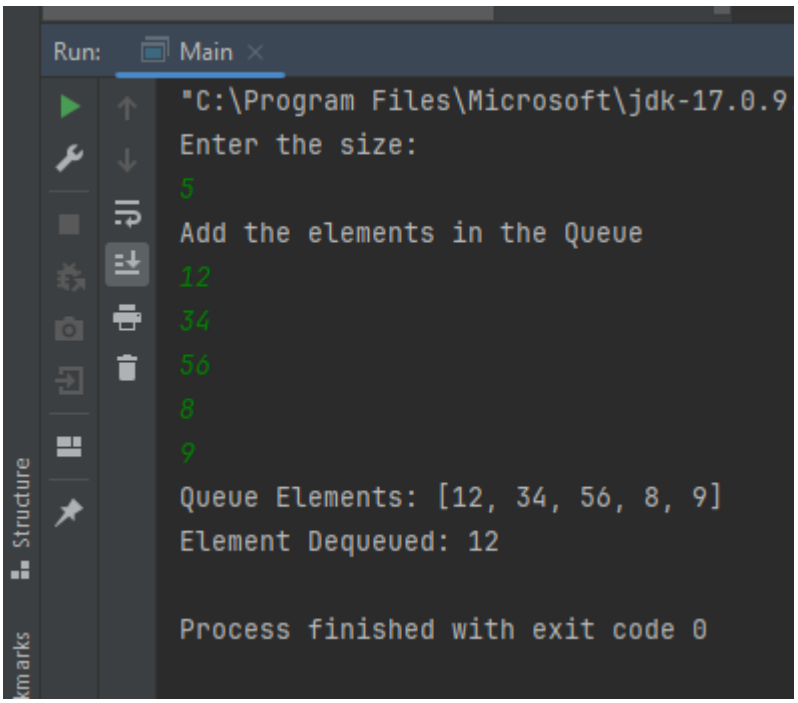
Some of the Stack and Linked list methods are refer docs for inbuilt method

Hash Collections and its types refer code file:

Queue in java

```
package org.example;
import java.util.*;
import java.util.concurrent.LinkedBlockingDeque;
import java.util.concurrent.LinkedBlockingQueue;

public class Main {
   public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
       Queue q = new LinkedBlockingQueue();

       System.out.println("Enter the size: ");
       int size = sc.nextInt();
```

```
        //enqueue operation
        System.out.println("Add the elements in the Queue");
        for(int i=0;i<size;i++){
            q.offer(sc.nextInt());
        }

        //display queue
        System.out.println("Queue Elements: "+q);

        // dequeue Operation:

        System.out.println("Element Dequeued: "+q.poll());


    }
}
```



Maps in Java:

TreeMap and HashMap

Refer code doc:

Multithreading in Java: