

EXCEPTION HANDLING

Write a java program to implement exception handling using try-catch-finally block. Here implement ArithmeticException and ArrayIndexOutOfBoundsException as two cases using switch statement. Also use do...while loop for proper output.

//Program

```
import java.util.Scanner;

public class Exception
{
    public static void main(String[] args)
    {
        Scanner sc=new Scanner(System.in);
        char confirmation;
        do
        {
            System.out.println("Enter your choice");
            System.out.println("1.Arithmetic operation ");
            System.out.println("2.Array access");
            int choice=sc.nextInt();
            switch(choice) {
                case 1:
                    try
                    {
                        System.out.println("Enter the number to be divided");
                        int dividend=sc.nextInt();
                        System.out.println("Enter the divisor");
                        int divisor=sc.nextInt();
                        int result=dividend/divisor;
                        System.out.println("The result is "+result);
                    }
                    catch(ArithmeticException e)
                    {
                        System.out.println("Caught an exception "+e.getMessage());
                    }
                    break;
                case 2:
                    try
                    {
                        int array[]={2,5,8,9};
                        System.out.println("Enter the index you want to access ");
                        int index=sc.nextInt();
                        System.out.println("The number in "+index+" is "+array[index]);
                    }
                    catch(ArrayIndexOutOfBoundsException e)
                    {
                        System.out.println("Caught an exception "+e.getMessage());
                    }
            }
        }
    }
}
```

```
}  
break;  
default:  
System.out.println("Invalid choice");  
break;  
}  
System.out.println("dO YOU WANT TO CONTINUE : type Y or N ");  
confirmation=sc.next().charAt(0);  
}  
while(confirmation=='y' || confirmation=='Y');  
  
}  
}
```