ARITHMETIC USING EXCEPTION

Code:

```java
2     package com.mycompany.exceptionforarithmetics;
3
4     import java.util.*;
5     public class ExceptionForArithmetics {
6
7         public static void main(String[] args) {
8             Scanner sc=new Scanner(System.in);
9             int a, b, choice;
10            do{
11                System.out.println("Enter 1st number: ");
12                a=sc.nextInt();
13                System.out.println("Enter 2nd number: ");
14                b=sc.nextInt();
15                System.out.println("Enter choice(1.'+'; 2.'-'; 3.'*';"
16                        + " 4.'/'; 5.Exit): ");
17                choice=sc.nextInt();
18                try{
                       switch(choice){
20                        case 1: System.out.println("Addition: "+(a+b)); break;
21                        case 2: System.out.println("Subtraction: "+(a-b)); break;
22                        case 3: System.out.println("Multiplication: "+(a*b)); break;
23                        case 4: System.out.println("Divide: "+(a/b)); break;
24                        case 5: break;
25                        default: System.out.println("Invalid choice ");
26                    }
27                }
28                catch(Exception e){
29                    System.out.println("It is divided by zero. ");

30                    System.out.println("Try again. ");
31                }
32            }while(choice!=5);
33        }
34    }
```

Output:

```
Enter 1st number:
45
Enter 2nd number:
67
Enter choice(1.'+'; 2.'-'; 3.'*'; 4.'/'; 5.Exit):
3
Multiplication: 3015
Enter 1st number:
23
Enter 2nd number:
0
Enter choice(1.'+'; 2.'-'; 3.'*'; 4.'/'; 5.Exit):
4
It is divided by zero.
Try again.
Enter 1st number:
23
Enter 2nd number:
1
Enter choice(1.'+'; 2.'-'; 3.'*'; 4.'/'; 5.Exit):
5
```