

Assignment: Day10

Question1:

Write a method that accepts the date of birth from the user in the String form and returns the age of the user, If the supplied date is in the future then print the message: **"Date should not be in Future"**. and if the user will supply an invalid date format then throw a checked exception (User-defined exception) called **"InvalidDateFormat"** exception.

Call this method from the main method and display the appropriate result by handling the **"InvalidDateFormat"** exception.

Note: The application should not terminate abnormally.

Question 2:

Write a method inside a class **EmployeeBonus** which will take the joining date in the form of a String and return the bonus in double. If Employee is having less than 1 year of experience then give the bonus as 5000. If Employee is having 1 year or less than 2 years of experience then give the bonus as 8000.

If Employee is having more than 2 years of experience then give the bonus as 10000.

Create a user-defined checked exception called **InvalidAge** exception

If Employee passes any date which is in future then throw the **InvalidAge** exception with the message: "Age should not be in the future".

If Employee passes any date in the wrong format then throw the **InvalidAge** exception with the message: "Please pass the date in the correct format";

Create a Main class with the main method and call the method of **EmployeeBonus**

class

Note: Employee class should not terminate abnormally

Question 3:

Consider the following example:

```
import java.util.Scanner;

class Main {
    public static void main(String args[]) {

        System.out.println("start of main..");

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter num1");
        int num1 = sc.nextInt();

        System.out.println("Enter num2");
        int num2 = sc.nextInt();

        String message = null;
        int num3 = num1 / num2;

        if(num3 > 10){
            message = "Welcome to Exception Handling ";
        }

        System.out.println("Message is :"+message.toUpperCase());
        System.out.println("end of main");
    }
}
```

Wrap the appropriate code inside the try-catch blocks so that :

If the user enters any string instead of a number then it should show

“Please enter the valid number”

If the user will enter num2 as 0 then it should show the following message inside the catch block.

“num2 should not be 0”

If the output of the expression `num3 > 10` returns false then should show the following message inside the catch block:

“String value is null”

Otherwise, it should print the following message:

“Message is: WELCOME TO EXCEPTION HANDLING”

Note: main method should be terminated normally, i.e. “end of main” should be printed at last.