Q1. Write a program to valid the email address and display suitable exception if there is any mistake.

Create 3 custom exceptions class as below

- 1. DotException
- 2. AtTheRateException
- 3. DomainException

A typical email address should have a "." character, "@" character and also the domain name should be valid. Valid domain names for practice be 'in', 'com', 'net' or 'biz'.

Display Invalid Dot usage, Invalid @ usage or Invalid Domain message based on email id.

Get the email address from the user, validate the email by checking the above-mentioned criteria and print the validity status of the input email address.

Input Format

First line of input contains the email to be validated

Output Format

Print Valid email address or Invalid email address along with suitable exception

Q3. Divide by zero exception.

Write a program to obtain two numbers and print their quotient. In case of exception print the same.

Input Format

Given a single line input separated by space.get the Integer N1 and N2

Output Format

Display the quotient if there is no Exception.else print the Exception,

Q4. NullPointerException

Another prominent exception is NullPointerException. It occurs when you try to access a null value. Assign null value to a string and obtain an index position and try to access it. Print the exception.

Input Format

Input consists of an integer.

Output Format

Output prints the null pointer exception

Q5. Write a program to validate the given password. A password is said to be strong if it satisfies the following criteria

- i) It should be minimum of 10 characters and a maximum of 20 characters
- ii) It should contain at least one digit
- iii)It should contain at least one special character (!,@,#,\$,%,^,&,*)

If the password fails any one of the criteria, it is considered as weak.

Create a class called User with the following private attributes.

- 1. name as String
- 2. mobile as String
- 3. username as String
- 4. password as String

Create a class called UserBO with following methods.

static void validate(User u) This method throws Exception with a suitable message if the Password is weak.

Create a Mainclass get inputs from the user. Validate the password and if there is an exception, handle the exception and prompt the user with a suitable message.

Refer Sample input and output for exact statement

Input Format

Name

Phone number

User Name

Password

Output Format

Print Valid Password or suitable exception