If statement with multiple conditions

```java
public class Test{
    public void login(String username, String password){
        if(username=="admin" && password=="admin"){
            System.out.println("Login Successful");
        }else{
            System.out.println("Login failed");
        }
    }

    public void checkUsernameExists(String username){
        if(username=="admin" || username=="admin2"){
            System.out.println("Username exists");
        }else{
            System.out.println("Username doesn't exist");
        }
    }
}
```

Pseudocode

- Pseudocode is an informal way of programming description that does not require any strict programming language syntax or underlying technology considerations.

- It is used for creating an outline or a rough draft of a program. Pseudocode summarizes a program's flow, but excludes underlying details.

- System designers write pseudocode to ensure that programmers understand a software project's requirements and align code accordingly.

- Pseudocode is not an actual programming language. So, it cannot be compiled into an executable program.

- It uses short terms or simple English language syntaxes to write code for programs before it is actually converted into a specific programming language.

- This is done to identify top level flow errors, and understand the programming data flows that the final program is going to use.

Examples

```
Start Program
Enter two numbers, A, B
Add the numbers together
Print Sum
End Program
```

```
IF student's grade is greater than or equal to 40
    PRINT "passed"
ELSE
    PRINT "failed"
ENDIF
```

```
FOR X = 1 to 10
        PRINT X
        Increment counter
  END FOR


WHILE Population < Limit
    Compute Population as Population + Births — Deaths
ENDWHILE
```

Questions

1. Write a program using **if else if** to print grades of students.

   Condition: Below 40 is considered as fail, 40 -50 as third division, 50-60 as second division, 60- 80 as first division and 80 above distinction.

2. WAP to print the name of day for input number using Switch case. Also, handle invalid number case.

3. WAP to print all the even and odd number from 1 to 100 using while loop.

4. WAP to print the multiplication table for input number using for loop.

5. Research and write down pseudo code for question no. 1, 2, 3 and 4.