Level 2 Tasks:-

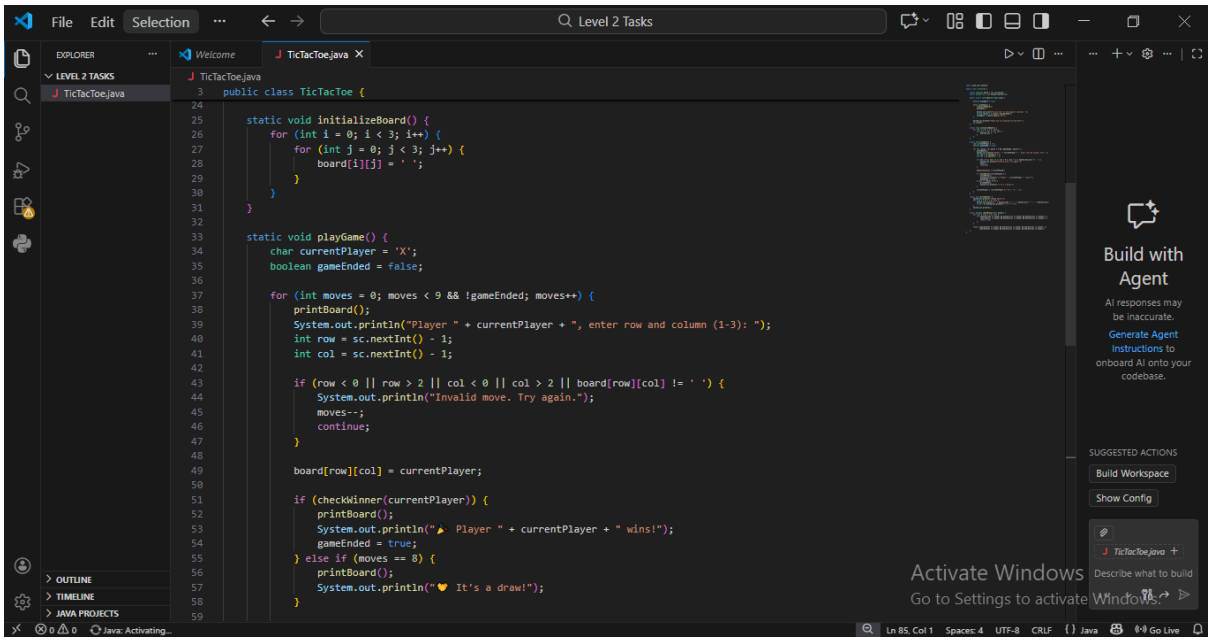
Task 1

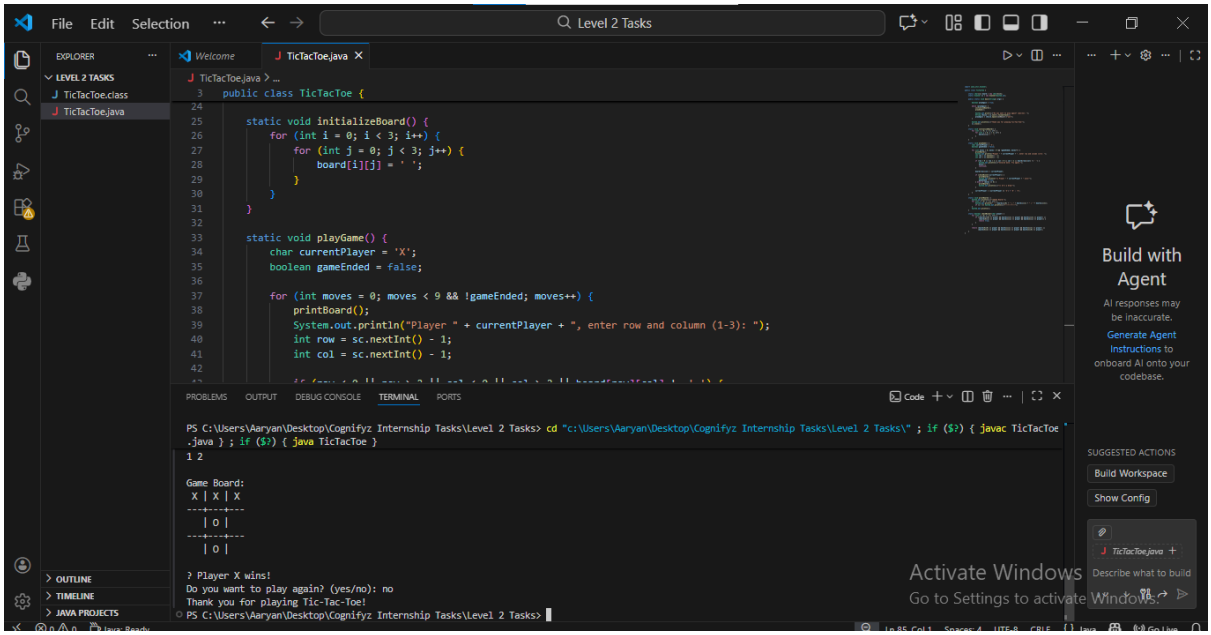
Task: Tic-Tac-Toe Game

Description: Implement a two-player tic-tac-toe game. Display the game board and prompt each player to enter their moves. Check for a winning condition or a draw after each move, and display the result accordingly. Allow the players to play multiple rounds if desired.

Skills:

Arrays or matrices, loops, conditional statements.



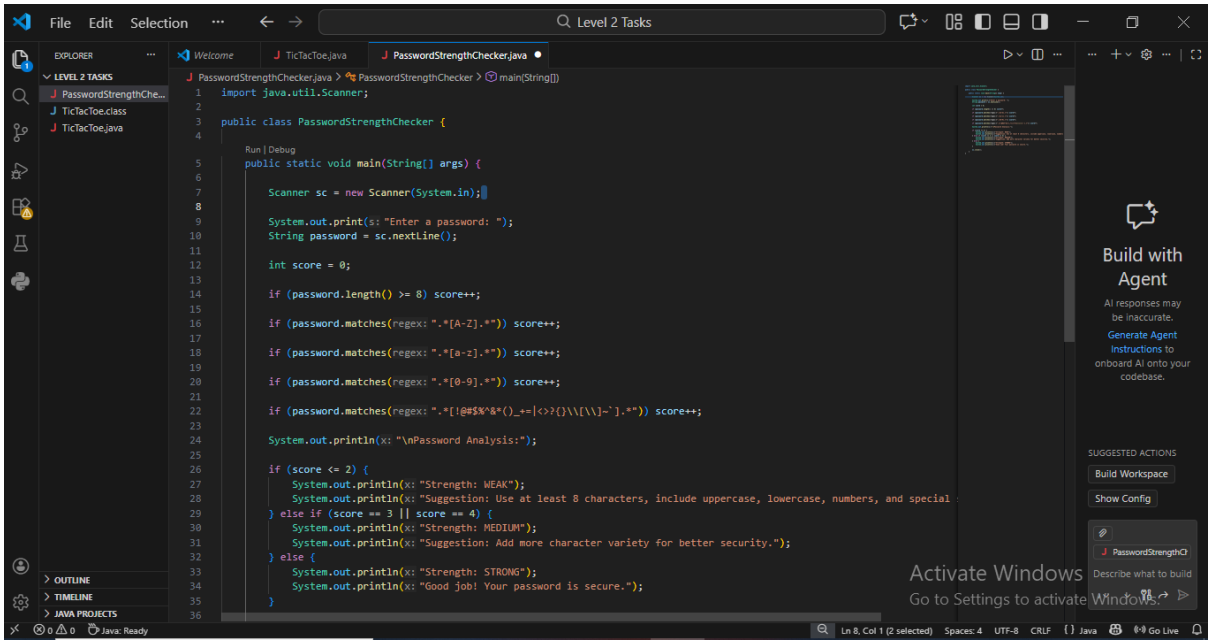


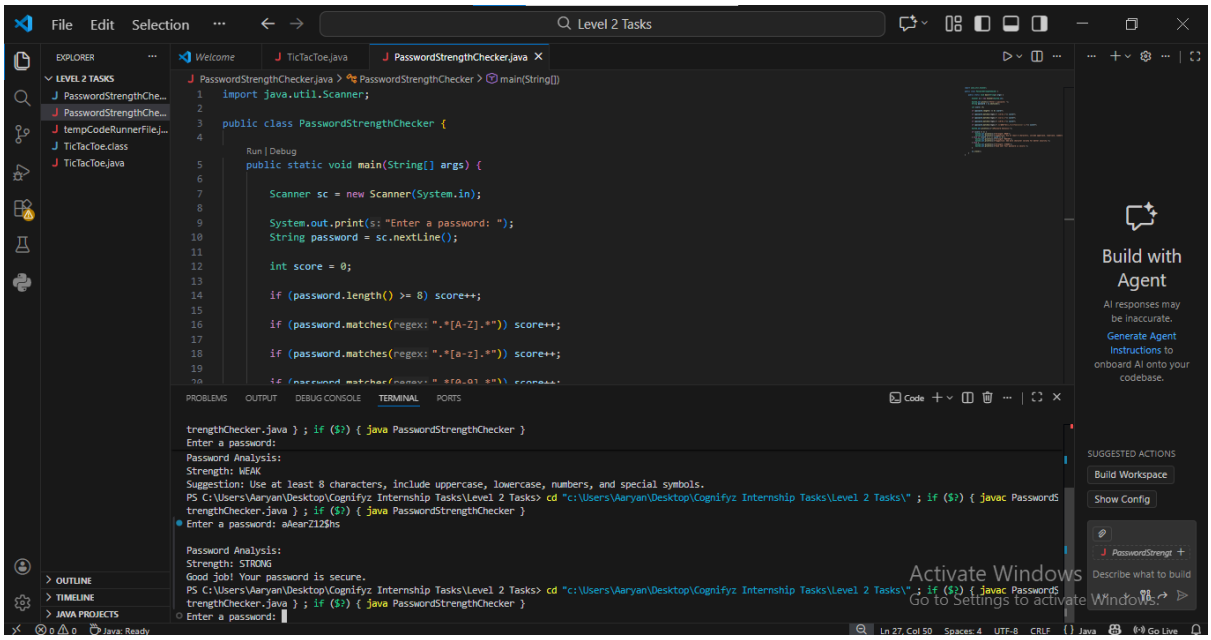
Task2: Password Strength Checker

Description: Create a program that checks the strength of a password. Prompt the user to input a password and analyze its strength based on certain criteria, such as length, presence of uppercase letters, lowercase letters, numbers, and special characters. Provide feedback on the password strength.

Skills:

String statements.


File Edit Selection
Level 2 Tasks
EXPLORER
LEVEL 2 TASKS
PasswordStrengthChe...
TicTacToe.class
TicTacToe.java
Welcome
TicTacToe.java
PasswordStrengthChecker.java
PasswordStrengthChecker.java > PasswordStrengthChecker > main(String[])
import java.util.Scanner;
public class PasswordStrengthChecker {
Run | Debug
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print(s: "Enter a password: ");
String password = sc.nextLine();
int score = 0;
if (password.length() >= 8) score++;
if (password.matches(regex: ".*[A-Z].*")) score++;
if (password.matches(regex: ".*[a-z].*")) score++;
if (password.matches(regex: ".*[0-9].*")) score++;
if (password.matches(regex: ".*[!@#$%^&*()_+=|<>?{}\\[\\]~`].*")) score++;
System.out.println(x: "\nPassword Analysis:");
if (score <= 2) {
System.out.println(x: "Strength: WEAK");
System.out.println(x: "Suggestion: Use at least 8 characters, include uppercase, lowercase, numbers, and special
} else if (score == 3 || score == 4) {
System.out.println(x: "Strength: MEDIUM");
System.out.println(x: "Suggestion: Add more character variety for better security.");
} else {
System.out.println(x: "Strength: STRONG");
System.out.println(x: "Good job! Your password is secure.");
}
OUTLINE
TIMELINE
JAVA PROJECTS
Java: Ready
Ln 8, Col 1 (2 selected)
Spaces: 4
UTF-8
CRLF
Java
Go Live
Build with Agent
AI responses may be inaccurate.
Generate Agent Instructions to onboard AI onto your codebase.
SUGGESTED ACTIONS
Build Workspace
Show Config
Describe what to build
Activate Windows
Go to Settings to activate Windows.

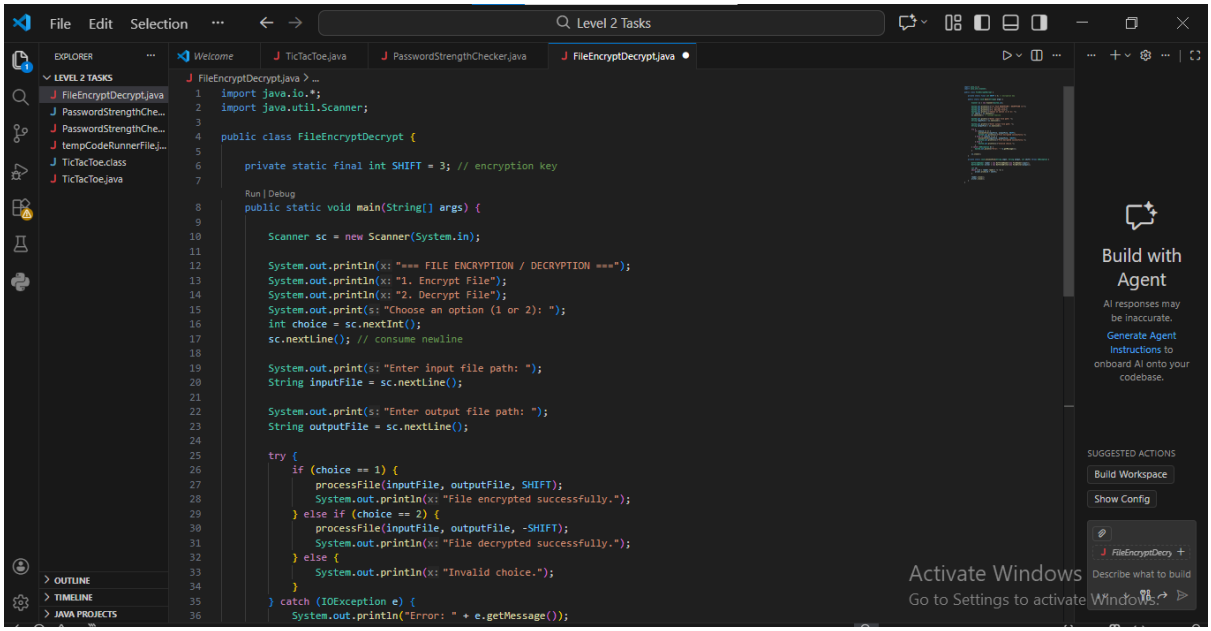

File Edit Selection
Level 2 Tasks
EXPLORER
LEVEL 2 TASKS
PasswordStrengthChe...
PasswordStrengthChe...
tempCodeRunnerFile.j...
TicTacToe.class
TicTacToe.java
Welcome
TicTacToe.java
PasswordStrengthChecker.java
PasswordStrengthChecker.java > PasswordStrengthChecker > main(String[])
import java.util.Scanner;
public class PasswordStrengthChecker {
Run | Debug
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);
System.out.print(s: "Enter a password: ");
String password = sc.nextLine();
int score = 0;
if (password.length() >= 8) score++;
if (password.matches(regex: ".*[A-Z].*")) score++;
if (password.matches(regex: ".*[a-z].*")) score++;
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
Code
trengthChecker.java } ; if ($?) { java PasswordStrengthChecker }
Enter a password:
Password Analysis:
Strength: WEAK
Suggestion: Use at least 8 characters, include uppercase, lowercase, numbers, and special symbols.
PS C:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks> cd "c:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks\" ; if ($?) { javac PasswordS
trengthChecker.java } ; if ($?) { java PasswordStrengthChecker }
Enter a password: aAearZ12$hs
Password Analysis:
Strength: STRONG
Good job! Your password is secure.
PS C:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks> cd "c:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks\" ; if ($?) { javac PasswordS
trengthChecker.java } ; if ($?) { java PasswordStrengthChecker }
Enter a password:
OUTLINE
TIMELINE
JAVA PROJECTS
Java: Ready
Ln 27, Col 50
Spaces: 4
UTF-8
CRLF
Java
Go Live
Build with Agent
AI responses may be inaccurate.
Generate Agent Instructions to onboard AI onto your codebase.
SUGGESTED ACTIONS
Build Workspace
Show Config
Describe what to build
Activate Windows
Go to Settings to activate Windows.

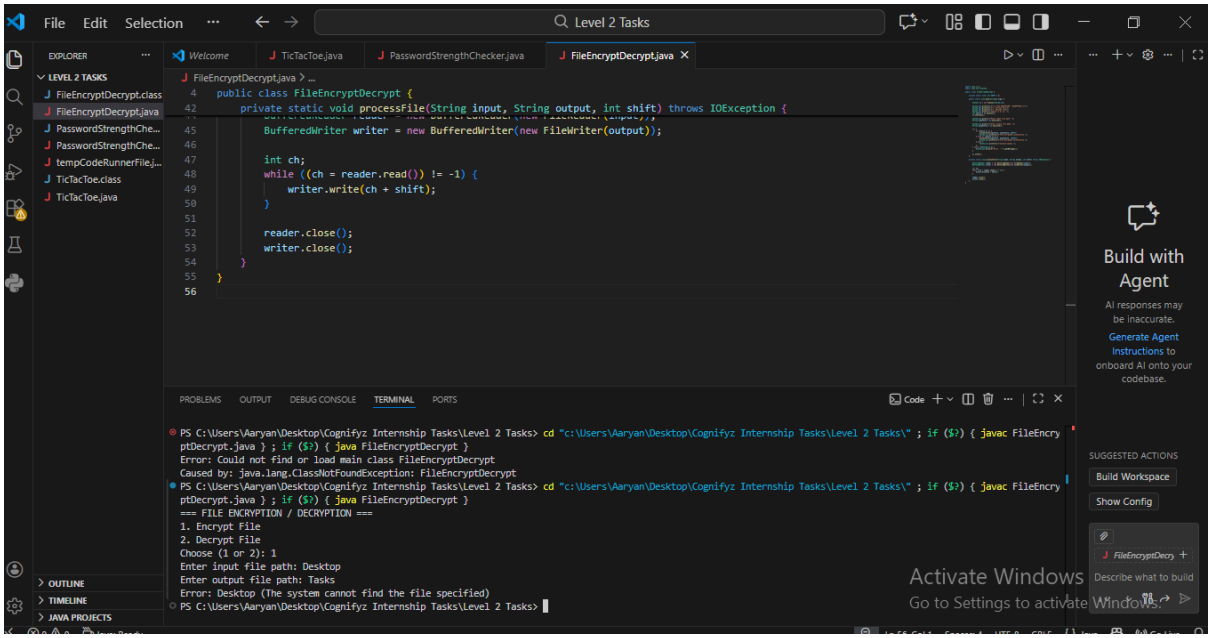
Task3: File Encryption/Decryption

Description: Create a program that encrypts or decrypts the contents of a text file using a simple encryption algorithm. Prompt the user to choose between encryption or decryption, and input the file name or path. Encrypt or decrypt the file accordingly and save the result to a new file.

Skills:

File handling, string manipulation, basic input/output operations.




File Edit Selection
Level 2 Tasks
EXPLORER
LEVEL 2 TASKS
FileEncryptDecrypt.class
FileEncryptDecrypt.java
PasswordStrengthChe...
PasswordStrengthChe...
tempCodeRunnerFile.j...
TicTacToe.class
TicTacToe.java
Welcome
TicTacToe.java
PasswordStrengthChecker.java
FileEncryptDecrypt.java
FileEncryptDecrypt.java > ...
4 public class FileEncryptDecrypt {
42 private static void processFile(String input, String output, int shift) throws IOException {
45 BufferedWriter writer = new BufferedWriter(new FileWriter(output));
47 int ch;
48 while ((ch = reader.read()) != -1) {
49 writer.write(ch + shift);
50 }
52 reader.close();
53 writer.close();
54 }
55 }
56
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Code
PS C:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks> cd "c:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks\" ; if ($?) { javac FileEncryptDecrypt.java } ; if ($?) { java FileEncryptDecrypt }
Error: Could not find or load main class FileEncryptDecrypt
Caused by: java.lang.ClassNotFoundException: FileEncryptDecrypt
PS C:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks> cd "c:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks\" ; if ($?) { javac FileEncryptDecrypt.java } ; if ($?) { java FileEncryptDecrypt }
=== FILE ENCRYPTION / DECRYPTION ===
1. Encrypt File
2. Decrypt File
Choose (1 or 2): 1
Enter input file path: Desktop
Enter output file path: Tasks
Error: Desktop (The system cannot find the file specified)
PS C:\Users\Aaryan\Desktop\Cognifyz Internship Tasks\Level 2 Tasks>
OUTLINE
TIMELINE
JAVA PROJECTS
Build with Agent
AI responses may be inaccurate.
Generate Agent Instructions to onboard AI onto your codebase.
SUGGESTED ACTIONS
Build Workspace
Show Config
Describe what to build
Activate Windows
Go to Settings to activate Windows.