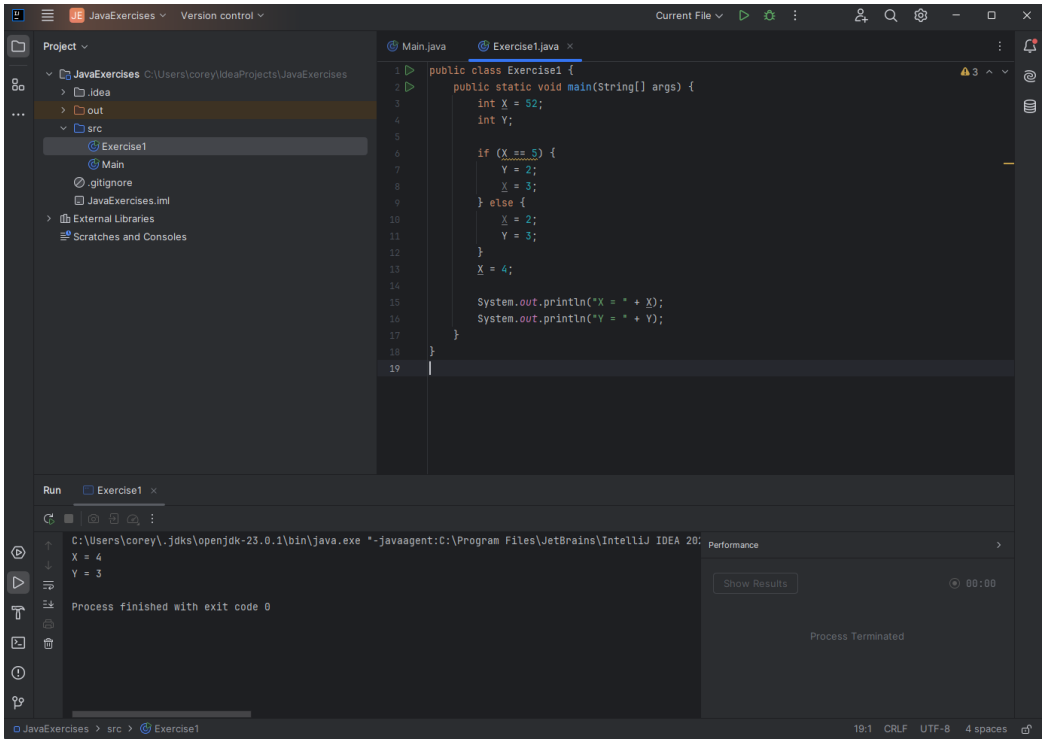
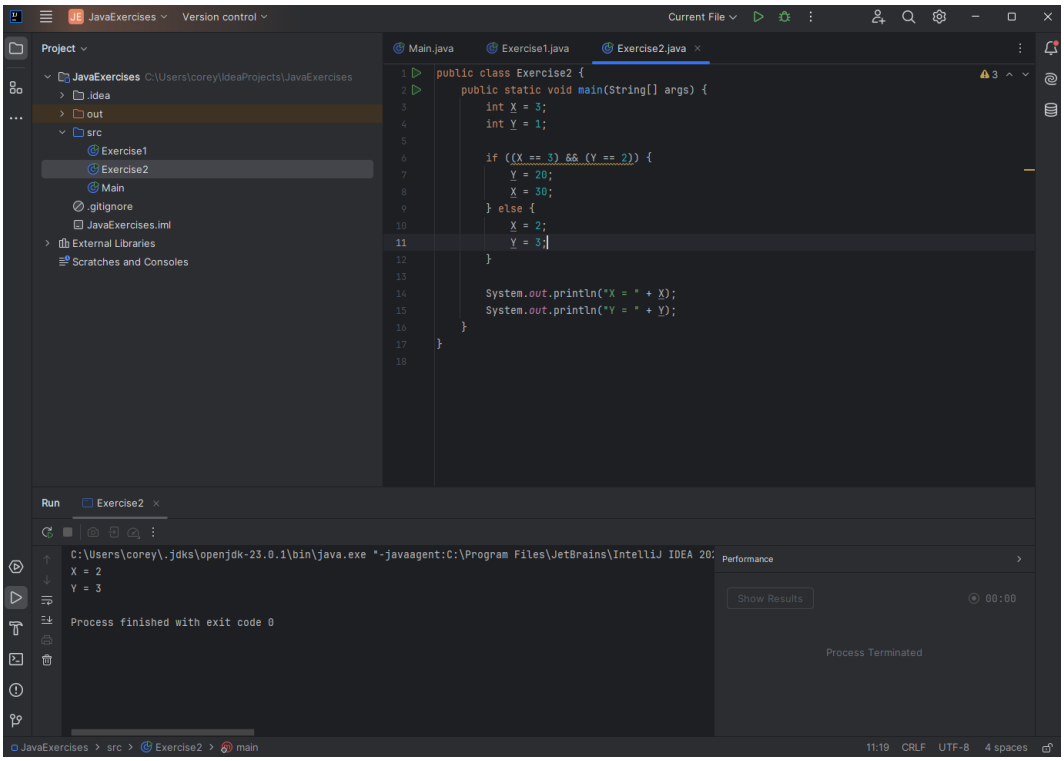
Q1.



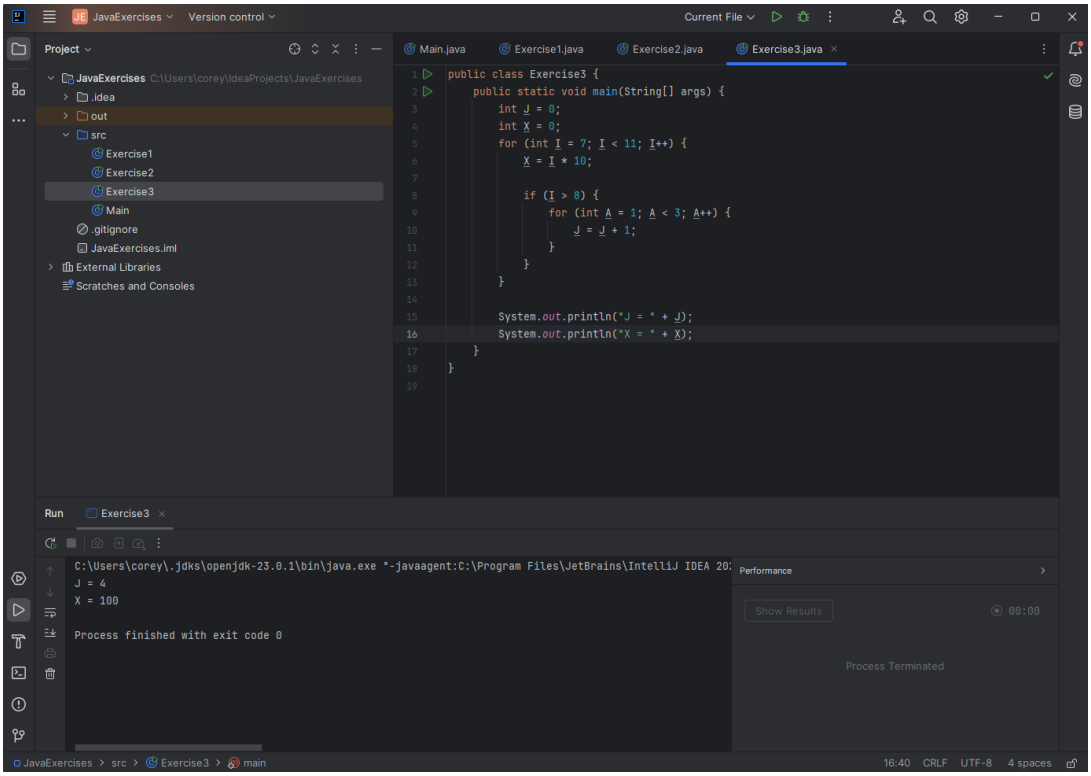
Programme declares X = 52 and Y = 0
Since X is not 5, first IF statement is always false,
Else statement then declares X = 2 and Y = 3
After this X = 4 is declared, Y = 3 remains the same
Output is X =4, Y =3

Q2.



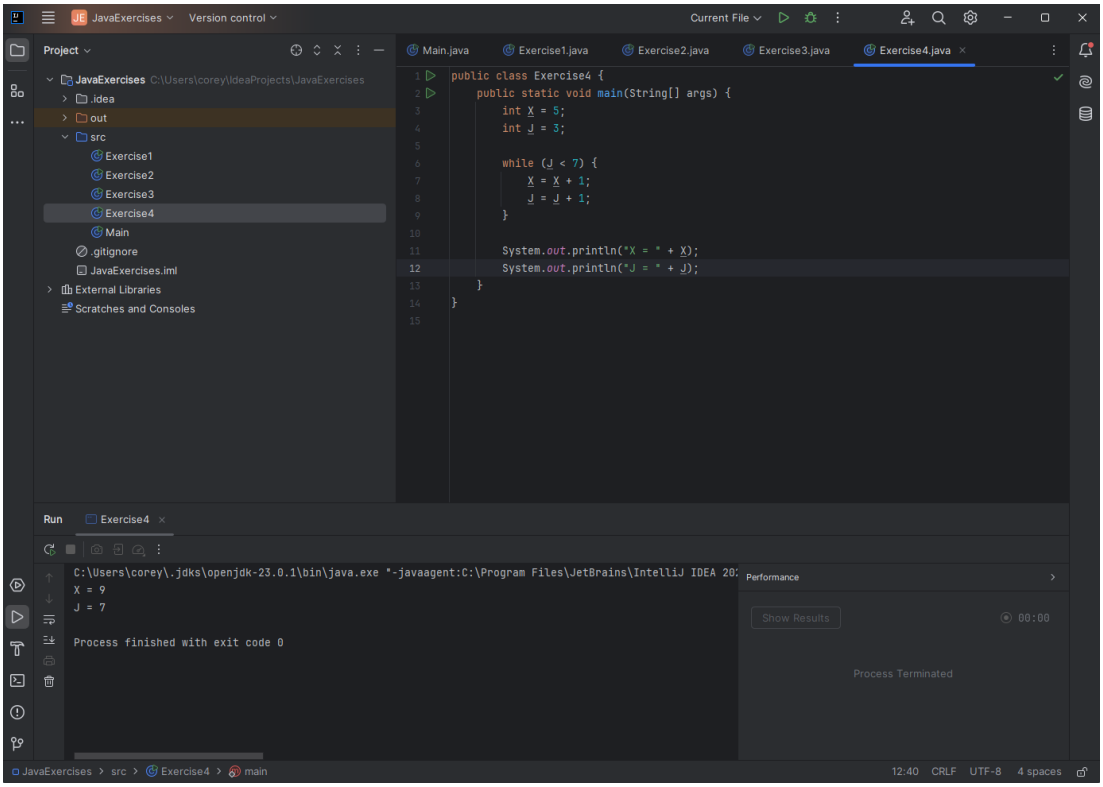
Programme starts with X = 3, Y = 1
First IF statement conditions are not met, so statement is false (doesn't execute)
Else statement declares X = 2 and Y = 3
This is the final values

Q3.



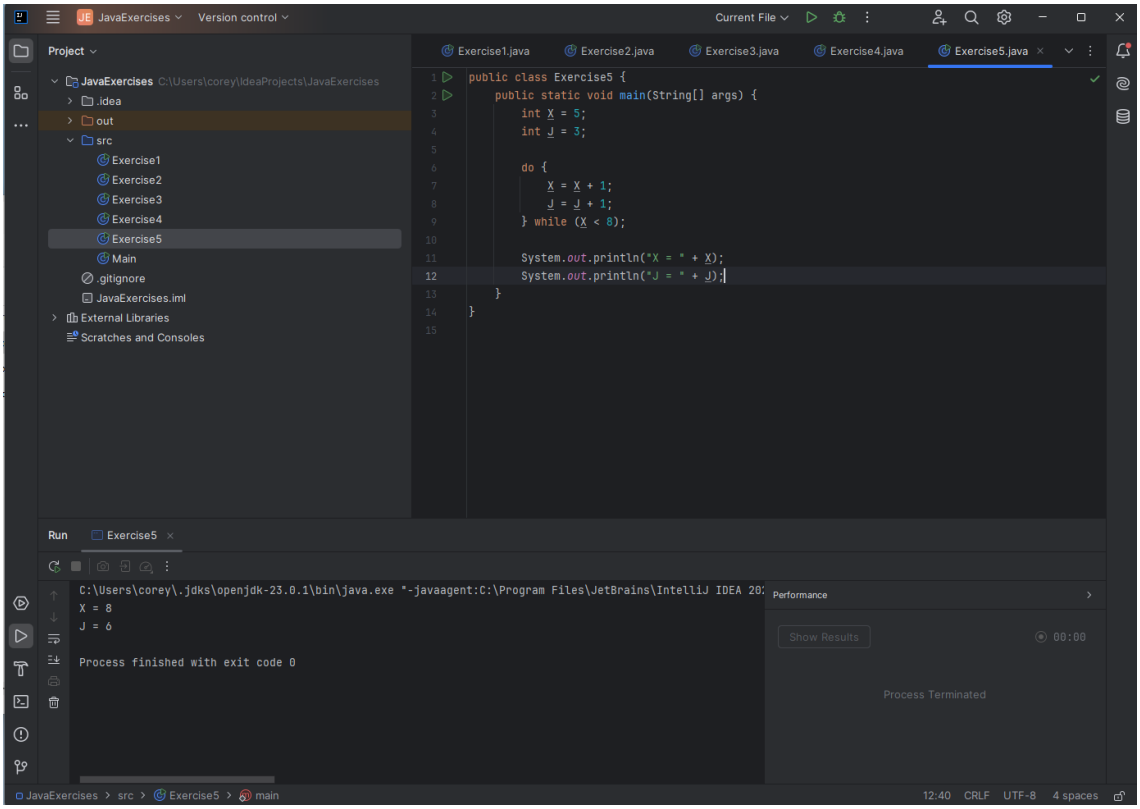
Programme itilalizes J and X as 0
First IF statement conditions are not met so statement is false
Values after first iteration X = 70, J = 0
Second iteration IF statement conditions are not met
Values after this iteration X = 80, J = 0
Third iteration IF statement conditions are met
ELSE block executes the inner loop
Values after this iteration
X = 90 J = 2
Fourth iteration IF statement conditions are met
Values after this iteration
X = 100 J = 4

Q4.



Programme initalizes X = 5, J = 3
While J is less than 7 (true) X = X + 1 (X = 5 + 1), J = J + 1 (J = 3 + 1)
The loop continues until J becomes 7, at which point X = 9, J = 7

Q5.



Programme initalizes X = 5, J = 3
DO loop executes until X = 8
X = X + 1 (X = 5 + 1) J = J + 1 (J = 3 + 1)
Final result X = 8, J = 6