



Department of Computer Science and Engineering

Academic Year 2022 – 2023 (Odd Semester)

Degree, Semester & Branch: V Semester B.E. ECE 'B'

Course Code & Title: CS8392 Object Oriented Programming

Name of the Faculty member (s): Dr.K.Vivekrabinson, AP/CSE

Innovative Practice Description

- **Unit / Topic:** Unit III / Reading and Writing console & Files
- **Course Outcome:** CO3
- **Topic Learning Outcome:** TLO8
- **Activity Chosen:** Crossword Puzzle
- **Justification:**

In Java different types of input and output streams are available. In order to remember the different classes used for input and output stream and file processing, a crossword puzzle is used instead of a normal way of summary.
- **Time Allotted for the Activity:** 10 Minutes
- **Details of the Implementation:**
 - A crossword is an interesting word puzzle activity that helps the students recollect the concept and find the answer individually. It is one type of game, so this is an enjoyable activity rather than a regular multiple-choice questions test.
 - The activity was conducted in a classroom for a duration of 10 minutes.
 - The students were given with a crossword puzzle of 10 questions on paper. The questions were from the Input and output basics. They have to think and write the answers to the given puzzle. The Crossword puzzle given to students is shown in Figure 1.
 - The activity was conducted during the last 10 minutes of the class.
 - After the completion the answers were corrected and given to the students. Sample answers were shown in Figure:2-4.
 - The answers for the wrong questions were discussed at the end of the class to make them to know the answer of all the questions.
- **Crossword Puzzle Questions**
 - **ACROSS**
 3. method to clear all the data present in output buffers
 4. Commonly used class to write a file in the character stream
 6. class used to read data from console other than the console and scanner
 7. Exception is thrown by read() method
 9. The class provides the capacity to read primitive datatypes from an input stream

- **DOWN**

1. class is used to read password
2. Method that prints ASCII values for their corresponding integer values
4. Commonly used class to read files in the byte stream
5. class used to read a stream of characters
8. Input and Output streams are defined in this package

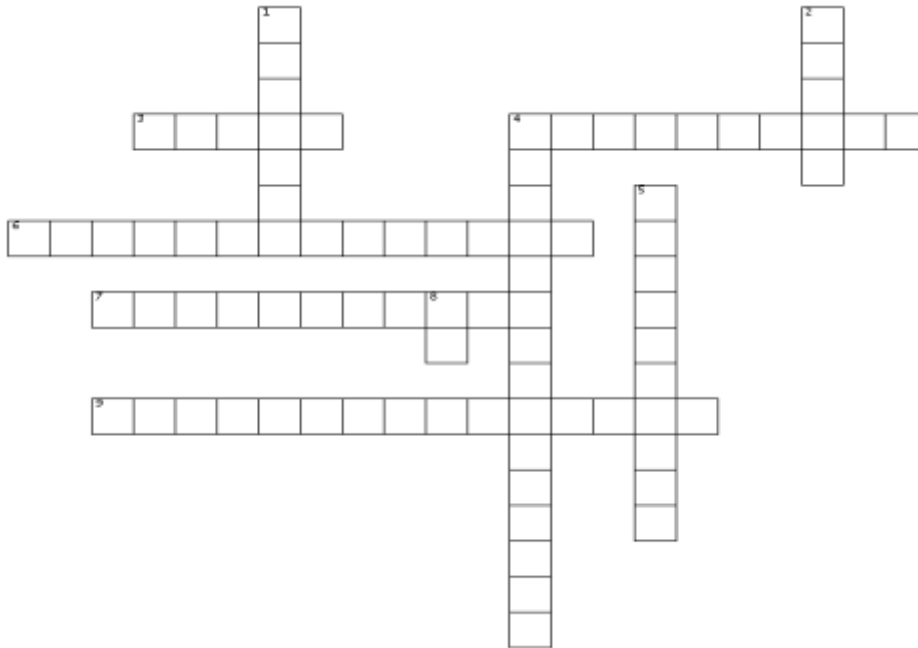


Figure1: Crossword Puzzle given to the students

- **ANSWER**

ACROSS

3. Flush
4. FileWriter
6. BufferedReader
7. IOException
9. DataInputStream

DOWN

1. console
2. write
4. FileInputStream
5. FileReader
8. io

- **CO – PO / PSO mapping:**

CO	PO1	PO2	PO3	PO8	PO9	PO10	PSO1	PSO2	PSO3
CO4	3	3	2	1	2	2	2	1	1

(1 – Low 2 – Moderate 3 – High)

PO / PSO mapped:

Innovative practice	PO1	PO2	PO3	PO9	PSO1
	3	3	2	2	1
Justification for correlation	The students apply the knowledge of Files	The students evaluate given problem statements and identify solutions	The students find the solutions for the given task.	The students demonstrate problem-solving skills as a team.	The students use the Files concepts to store and retrieve data to solve problems

• **Images / Screenshot of the practice:**

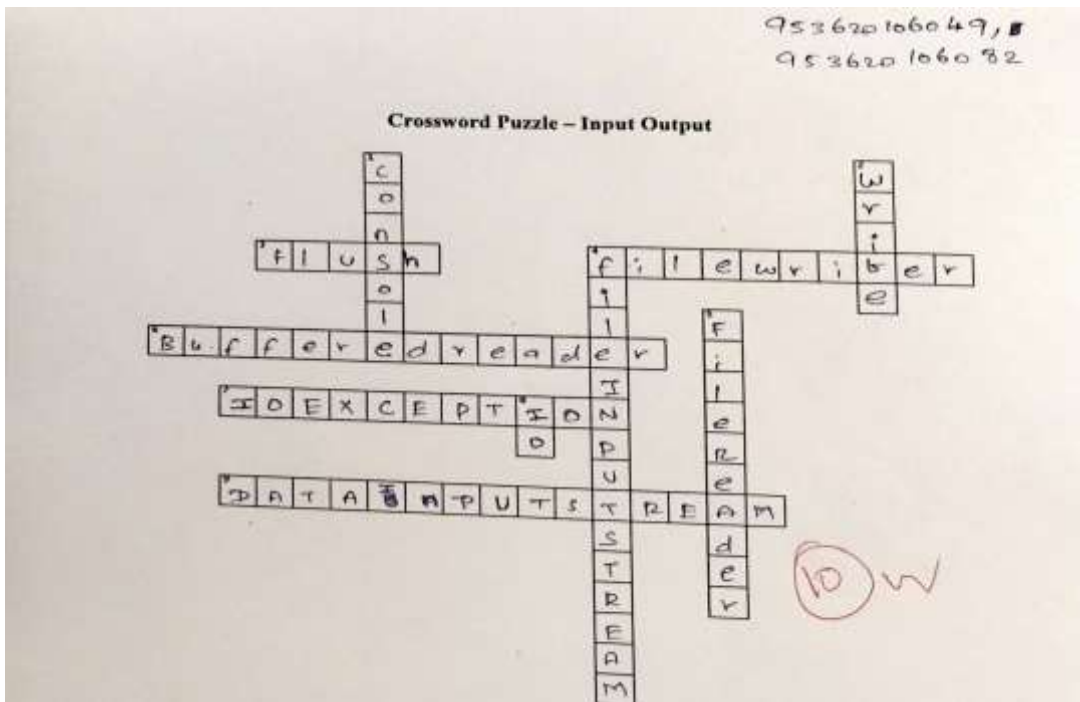


Figure 2: Sample crossword puzzle

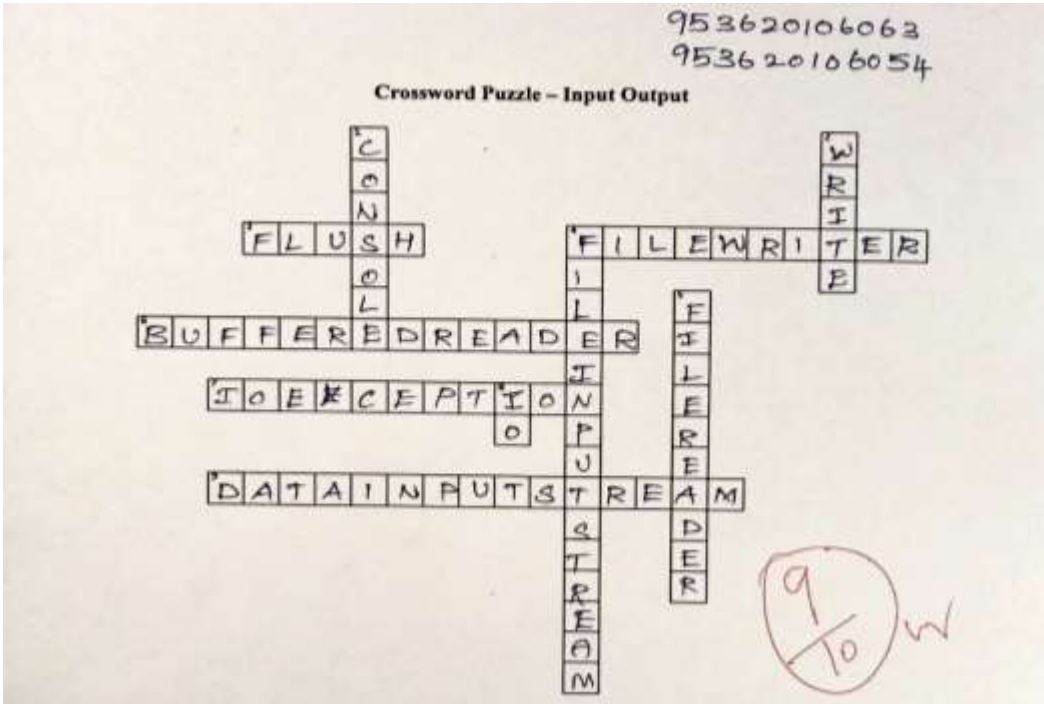


Figure 3: Sample crossword puzzle

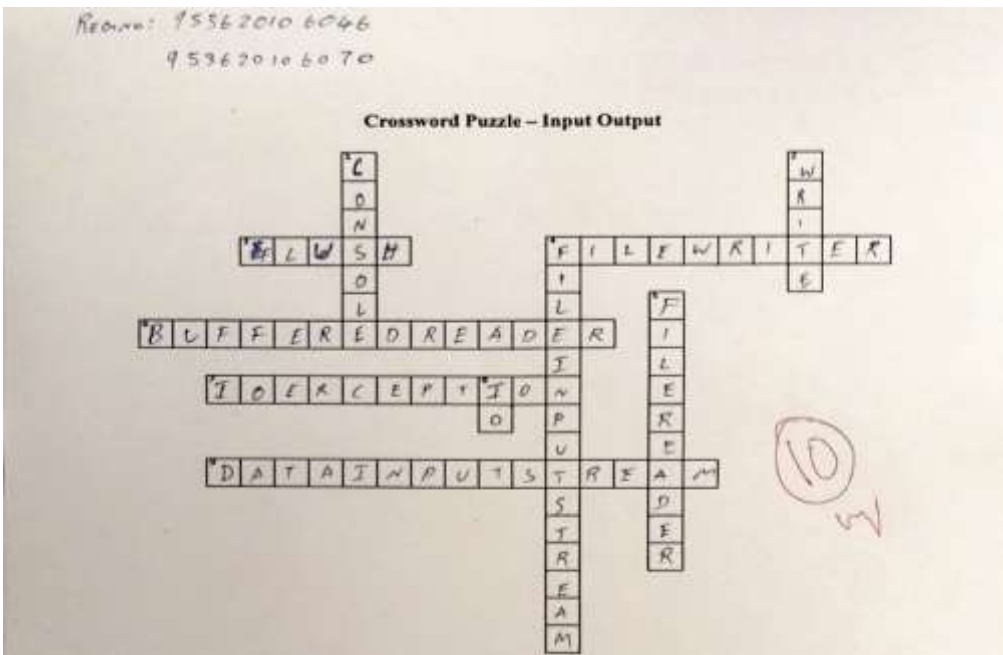


Figure 4: Sample crossword puzzle

- **Reflective Critique:**
- ❖ **Feedback of practice from students and other stakeholders:**
 - Some of the students find it very easy to identify the classes used for input and output.
 - Some of them take time to complete the puzzle and need more clarification on the various classes.
- ❖ **Benefit of the practice:** (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)
The student's level of understanding of various input-output stream classes improved. They can easily identify the place where they used which type of stream classes.
- ❖ **Challenges faced in implementation:**
 - Some students didn't understand the two types of IO stream classes and struggled to find answers to the puzzle.
 - Some of them feel difficult to identify the file classes and its methods such as reading and writing.

References:

- ❖ https://www.ritrjpm.ac.in/images/computer-science/RV_crossword_BSEC.pdf
- ❖ https://www.ritrjpm.ac.in/images/computer-science/48.GE8151_Crossword.pdf

Signature of the faculty

HOD