

“JP Practical 4: Write a program in Java to create student information using array”

A] Code:

```
package command.line.apps;

import java.util.Scanner;

public class D_StudentInfoArrs {
    public static void main(String[] args) {
        // Create Scanner object to take user input
        Scanner scanner = new Scanner(System.in);

        // Prompt the user to enter the number of students
        System.out.print("Enter the number of students: ");
        int numStudents = scanner.nextInt();

        // Create arrays to store student information
        String[] names = new String[numStudents];
        int[] ages = new int[numStudents];
        double[] grades = new double[numStudents];

        // Input student information
        for (int i = 0; i < numStudents; i++) {
            System.out.println("\nEnter details for Student " + (i + 1) + ":");
            System.out.print("Name: ");
            scanner.nextLine(); // Consume newline character
            try {
                names[i] = scanner.nextLine(); // Input full name
                System.out.print("Age: ");
                ages[i] = scanner.nextInt();
                System.out.print("Grade: ");
                grades[i] = scanner.nextDouble();
            } catch (Exception e) {
                System.err.println("Error: Invalid input format. Please enter valid data.");
                scanner.nextLine(); // Consume remaining input
                i--; // Decrement i to re-enter data for the same student
            }
        }

        // Display student information
        System.out.println("\nStudent Information:");
```

```

    for (int i = 0; i < numStudents; i++) {
        System.out.println("\nStudent " + (i + 1) + ":");
        System.out.println("Name: " + names[i]);
        System.out.println("Age: " + ages[i]);
        System.out.println("Grade: " + grades[i]);
    }
}
}

```

B] O/P:

A] Without exception:

```

Enter the number of students: 2

Enter details for Student 1:
Name: John Doe
Age: 20
Grade: 90

Enter details for Student 2:
Name: Jane Doe
Age: 18
Grade: 70

Student Information:

Student 1:
Name: John Doe
Age: 20
Grade: 90.0

Student 2:
Name: Jane Doe
Age: 18
Grade: 70.0

```

B] With exception:

```

Enter the number of students: 1

Enter details for Student 1:
Name: Jane Doe
Age: g
Error: Invalid input format. Please enter valid data.

Enter details for Student 1:
Name: |

```