Assignment API

Ans 1. Program to display current date and time in java.

```java
import java.time.*;

public class DateTime {

public static void main(String[] args) {

LocalDate date = LocalDate.now();

System.out.println(date);

LocalTime time=LocalTime.now();

System.out.println(time);

}

}
```

Output:

2024-06-29

15:19:06

Ans 2. program to convert a date to a string in the format "MM/dd/yyyy" :

```java
import java.time.LocalDate;

import java.time.format.DateTimeFormatter;

public class DateToString {
```

```
public static void main(String[] args) {

LocalDate date = LocalDate.of(2024,6,28);

DateTimeFormatter formatter =
DateTimeFormatter.ofPattern("MM/dd/yyyy");

String formattedDate = date.format(formatter);

System.out.println("Formatted Date: " + formattedDate);

    }

}
```

Output:

Formatted Date: 06/28/2024

Ans 3. Difference between collections and streams:

Collections	Streams
It is used for storing and manipulating group of data	Stream API is only used for processing group of data
All the classes and interfaces of this API is in the Java.util package	All the classes and interfaces of this API is in the java.util.stream package
All the classes and interfaces of this API is in the java.util.stream package	We can't modify streams.
Collections perform iteration over the collection.	Stream perform iteration internally.

Example:

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Output:

Ans 4. Enums are used to define a group of named constants which represent a collection of related constants that have a common purpose. Each constant in an enum is an instance of the enum type, and they are typically defined as public static final fields.

Example : Here , an enum called "DayOfWeek" that represents the days of the week. The enum has seven constants, each representing a day of the week. The constants are defined in all uppercase letters by convention.

```java
class EnumDemo{

public enum DayOfWeek {

MONDAY,

TUESDAY,

WEDNESDAY,

THURSDAY,

FRIDAY,

SATURDAY,
```

SUNDAY

}

public static void main(String args[]){

for(DayOfWeek d:DayOfWeek.values())

System.out.println(d);

}

}

Output:

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

SUNDAY

Ans5. Built-in annotations in Java are:

- @Override
- @Deprecated