**Advance Java**

**Task-5**

**Q1.String Conversion toUpperCase using Map() function**

**Class Creation:**

**// Class Creation**

**public class StringToUpperCase {**

**List of String Creation:**

**// Creating Stream of Strings**

**Stream<String> names = Stream.*of*("aBc", "d", "ef");**

**Method for Mapping the String Using Map() method:**

**// Method for mapping the String**

**public static void map(Stream<String> names){**

**// Maping the Stream to Convert Strings into UpperCase and Stored in the List**

**List<String> ToupperCase= names.map(String::toUpperCase).collect(Collectors.*toList*());**

**// Print Statement**

**System.*out*.println(ToupperCase);**

**}**

**OUTPUT:**

**[ABC, D, EF]**

**2.Checking the List Empty or not**

**// List of Strings**

**List<String>ListStrings= Arrays.*asList*("abc","","bc","efg","abcd","","jkl");**

**Method for Checking the List if the String is Empty or Not**

**// method Creation**

**public static void EmptyOrNot(List<String>ListStrings){**

**// Filter the List With String**

**List<String>NonEmptyStrings=ListStrings.stream().filter(string->!string.isEmpty()).collect(Collectors.*toList*());**

**System.*out*.println(NonEmptyStrings);**

**}**

**OUTPUT :**

**String list: [abc, , bc, efg, abcd, , jkl ]**

**Non Empty Strings: [abc, bc, efg, abcd, jkl ]**

**3. Students List Creation**

**List Interface Creation**

**// Student list Creation**

**List<String> studentNames = new ArrayList<>(10);**

**Method for find Students Name Starts with “A”**

**// Method for Find Student name Starts with "A"**

**public static void StudentsName(List<String>studentNames){**

**Scanner scanner = new Scanner(System.*in*);**

**System.*out*.println("Enter Student Names: ");**

**// Getting Student name from User**

**for (int i = 0; i < 10; i++) {**

**System.*out*.println("Enter Student name"+(i+1) +": ");**

**studentNames.add(scanner.nextLine());**

**}**

**Using Lambda Expression and Stream API for Filtering List**

**// Filtering Student Whose name Starts with "A"**

**List<String> nameStartWithA = studentNames.stream().filter(name -> name.startsWith("A")).collect(Collectors.*toList*());**

**OUTPUT :**

**Enter Student Names:**

**Enter Student name1:**

**Mani**

**Enter Student name2:**

**Amar**

**Enter Student name3:**

**Adam**

**Enter Student name4:**

**sam**

**Enter Student name5:**

**John**

**Enter Student name6:**

**Alis**

**Enter Student name7:**

**Dante**

**Enter Student name8:**

**Ajith**

**Enter Student name9:**

**bob**

**Enter Student name10:**

**Adolf**

**Total Students name's: [Mani, Amar, Adam, sam, John, Alis, Dante, Ajith, bob, Adolf]**

**Students name's Starts With 'A': [Amar, Adam, Alis, Ajith, Adolf]**

**4.Age Calculation**

**Getting User from the User**

**// Getting Input From the user**

**Scanner scanner=new Scanner(System.*in*);**

**System.*out*.println("Enter your Date of Birth(YYYY-MM-DD): ");**

**String dateOfBirth=scanner.nextLine();**

**Parsing Date**

**// Parsing date of birth into local Date**

**LocalDate birthDate=LocalDate.*parse*(dateOfBirth);**

**Getting Current Date**

**// Getting Current Date**

**LocalDate CurrentDate=LocalDate.*now*();**

**Calculate age**

**// Using Period Class To calculate age**

**Period age=Period.*between*(birthDate,CurrentDate);**

**Print Statement**

**System.*out*.println("Yours Age is: "+age.getYears()+" Years "+age.getMonths()+" Months "+age.getDays()+" Days");**

**OUTPUT :**

**Enter your Date of Birth(YYYY-MM-DD):**

**2002-07-20**

**Yours Age is: 22 Years 8 Months 2 Days**