1. Create a class "Amount In Words" within a user defined package to convert the amount into words.

Code:

Convertor.java

```
package amount;

public class Convertor {
  String[] u = { "", "one", "two", "three", "four", "five", "six",
"seven", "eight", "nine" };
  String[] t = { "ten", "eleven", "twelve", "thirteen", "fourteen",
"fifteen", "sixteen", "seventeen", "eighteen",
      "nineteen" };
  String[] d = { "", "", "twenty", "thirty", "forty", "fifty", "sixty",
"seventy", "eighty", "ninety" };

  public void Lakh(int digit) {
    Ten(digit);
    System.out.print("lakh ");
  }

  public void Thousand(int digit) {
    Ten(digit);
    System.out.print("thousand ");
  }

  public void Hundred(int digit) {
    System.out.print(u[digit]);
    System.out.print(" hundred ");
  }

  public void Ten(int digit) {
    int tens = digit / 10;
    int units = digit % 10;
    switch (tens) {
      case 0:
        Unit(units);
        break;
      case 1:
        System.out.print(t[units]);
        System.out.print(" ");
        break;
      default:
        System.out.print(d[tens]);
        System.out.print(" ");
```

```
        Unit(units);
    }
  }

  public void Unit(int digit) {
    if (digit != 0) {
      System.out.print(u[digit]);
      System.out.print(" ");
    }
  }
}
```

Main.java

```
import java.util.Scanner;
import java.lang.Math;
import amount.Convertor;

class Main {

  public static void main(String[] args) {

    Scanner sc = new Scanner(System.in);
    System.out.println("Enter a number: ");
    String numberString = sc.next();
    int len = numberString.length();
    int numArr[] = new int[len];

    int divider = (int) Math.pow(10, len - 1);

    for (int i = 0; i < len; i++) {
      numArr[i] = numberString.charAt(i) - '0';
    }

    Convertor conv = new Convertor();
    boolean skip = false;

    for (int k = len; k > 0; k--) {
      switch (k) {
        case 7:
          conv.Lakh(((numArr[len - k] * 10) + numArr[len - k + 1]));
          skip = true;
          break;
        case 6:
          if (!skip) {
```

```
            conv.Lakh(numArr[len - k]);
          } else {
            skip = false;
          }
          break;
        case 5:
          conv.Thousand(((numArr[len - k] * 10) + numArr[len- k + 1]));
          skip = true;
          break;
        case 4:
          if (!skip) {
            conv.Thousand(numArr[len - k]);
          } else {
            skip = false;
          }
          break;
        case 3:
          conv.Hundred(numArr[len - k]);
          break;
        case 2:
          conv.Ten(((numArr[len - k] * 10) + numArr[len - k + 1]));
          skip = true;
          break;
        case 1:
          if (!skip) {
            conv.Unit(numArr[len - k]);
          } else {
            skip = false;
          }
          break;
        default:
          break;
      }
    }
  }
}
```

Output:

```
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\Q.1> javac -d . .\Convertor.java
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\Q.1> javac .\Main.java
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\Q.1> java Main
Enter a number:
7654321
seventy six lakh fifty four thousand three hundred twenty one
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\Q.1>
```

1. Write a Java Program using static import.

Code:

```java
import static java.lang.Math.*;

public class Main {
    public static void main(String[] args) {
        double radius = 5.0;

        double area = PI * pow(radius, 2);
        double circumference = 2 * PI * radius;

        System.out.println("Radius: " + radius);
        System.out.println("Area: " + area);
        System.out.println("Circumference: " + circumference);
    }
}
```

Output:

```
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\PE_Q1> javac Main.java
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\PE_Q1> java Main
Radius: 5.0
Area: 78.53981633974483
Circumference: 31.41592653589793
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\PE_Q1>
```

2..Write a program that creates a user defined package and import that package in another package.

Code:

Print.java

```java
package package1;

public class Print {
  public void display() {
    System.out.println("Hello World.");
  }
}
```

Main.java

```java
package package2;

import package1.Print;

public class Main {
  public static void main(String[] args) {
    Print p = new Print();
    p.display();
  }
}
```

Output:

```
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\PE_Q2> javac .\package1\Print.java
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\PE_Q2> javac .\package2\Main.java
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\PE_Q2> java package2.Main
Hello World.
PS C:\Users\Ajay kumar\Desktop\SEIT-B\Java Practical\7\PE_Q2>
```