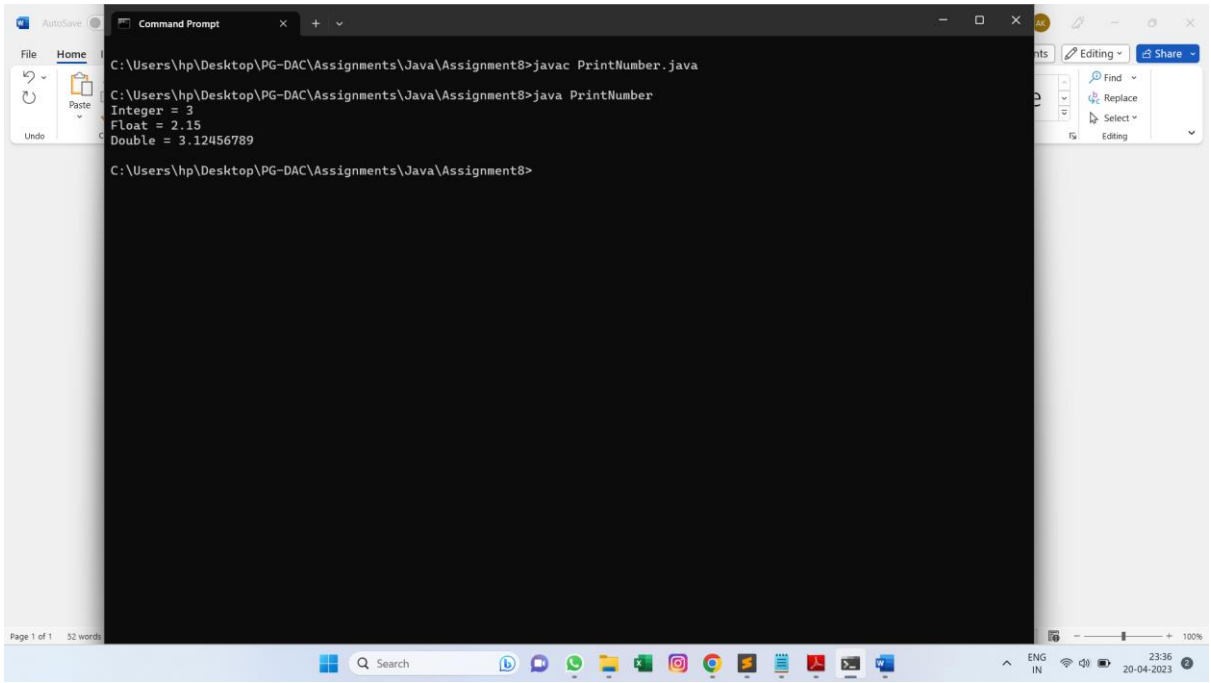
230350320047_Amruta Khandare_OOPS8

Q1:

```
public class PrintNumber{
	int i;
	float f;
	double d;
	public void printn(int i){
		System.out.println("Integer = "+i);
	}
	public void printn(float f){
		System.out.println("Float = "+f);
	}
	public void printn(double d){
		System.out.println("Double = "+d);
	}
	public static void main(String[] args) {
		PrintNumber p1 = new PrintNumber();
		p1.printn(3);
		p1.printn(2.15f);
		p1.printn(3.12456789);
	}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac PrintNumber.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java PrintNumber
Integer = 3
Float = 2.15
Double = 3.12456789
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
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52 words
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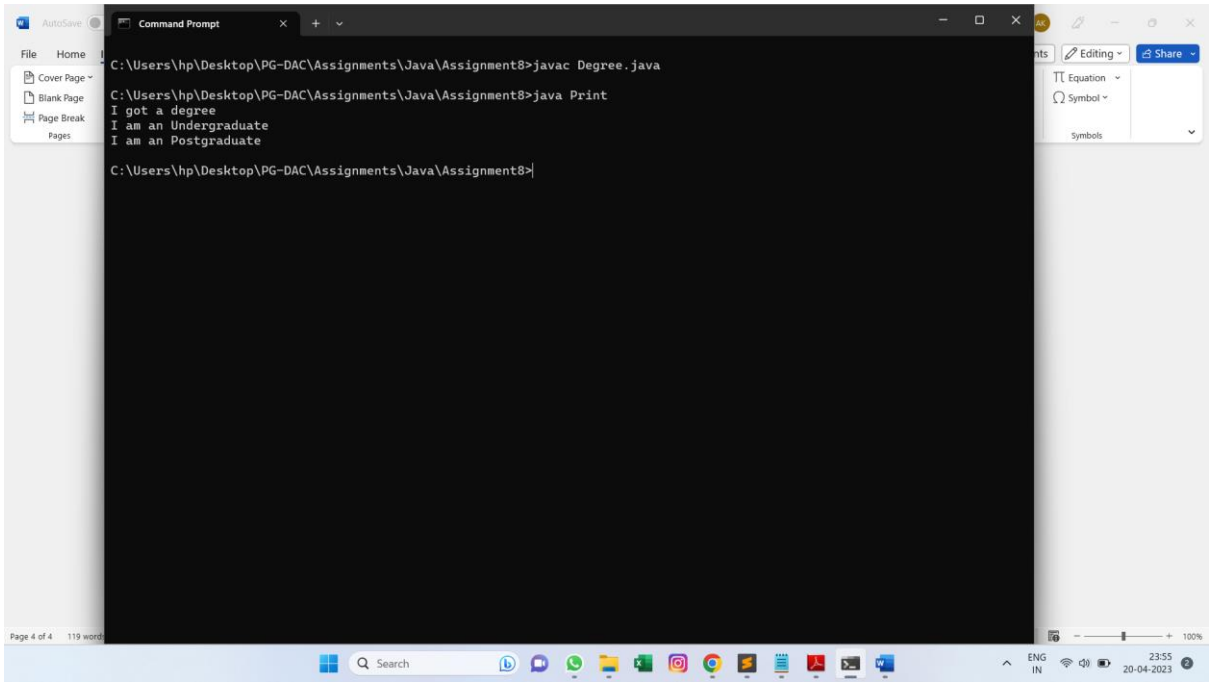
23:36
20-04-2023

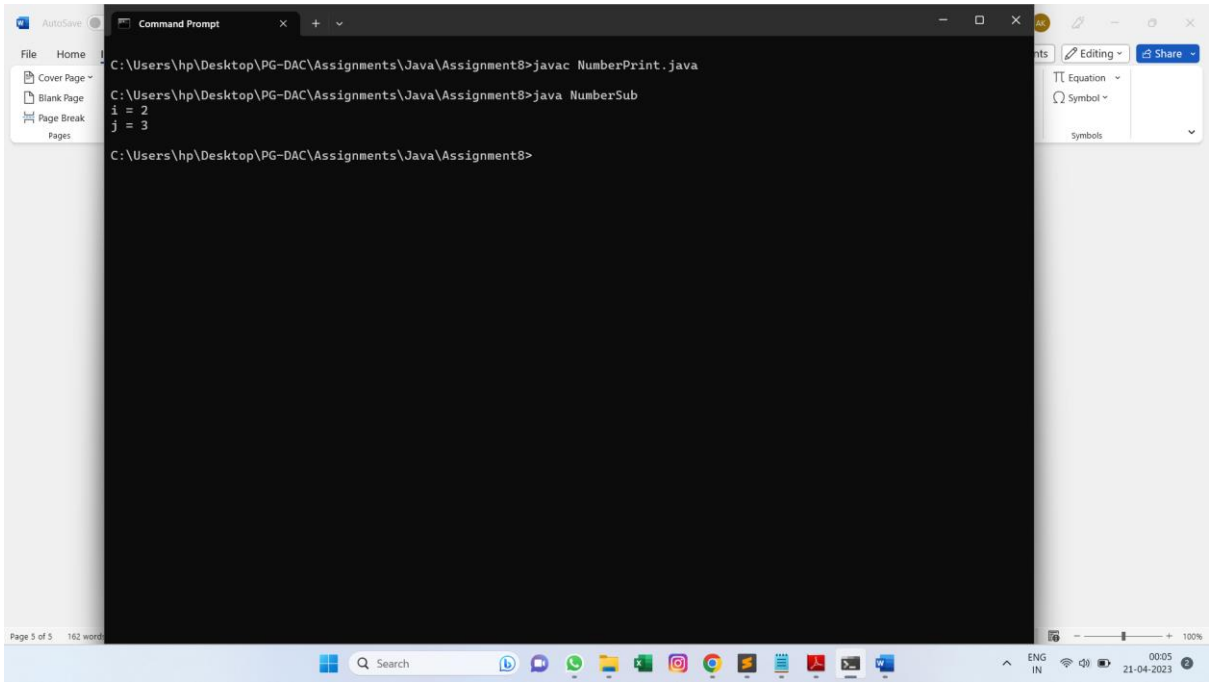
Q2:

```
public class Degree{
	public void getDegree(){
		System.out.println("I got a degree");
	}
	}
	class Undergraduate extends Degree{
		public void getDegree(){
			System.out.println("I am an Undergraduate");
		}
	}
	class Postgraduate extends Degree{
		public void getDegree(){
			System.out.println("I am an Postgraduate");
		}
	}
	class Print{
	public static void main(String[] args) {
		Degree d1 = new Degree();
		Undergraduate u1 = new Undergraduate();
		Postgraduate p1 = new Postgraduate();
		d1.getDegree();
		u1.getDegree();
		p1.getDegree();
	}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac Degree.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Print
I got a degree
I am an Undergraduate
I am an Postgraduate
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>

Q3:

```
public class NumberPrint{
	int i;
	public void numberPrint(int i){
		System.out.println(i);
	}
}
class NumberSub{
	int j;
	public void numberPrint(int i, int j){
		System.out.println("i = "+i+"\nj = "+j);
	}
public static void main(String[] args) {
	NumberSub n1 = new NumberSub();
	n1.numberPrint(2,3);
}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac NumberPrint.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java NumberSub
i = 2
j = 3
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
File
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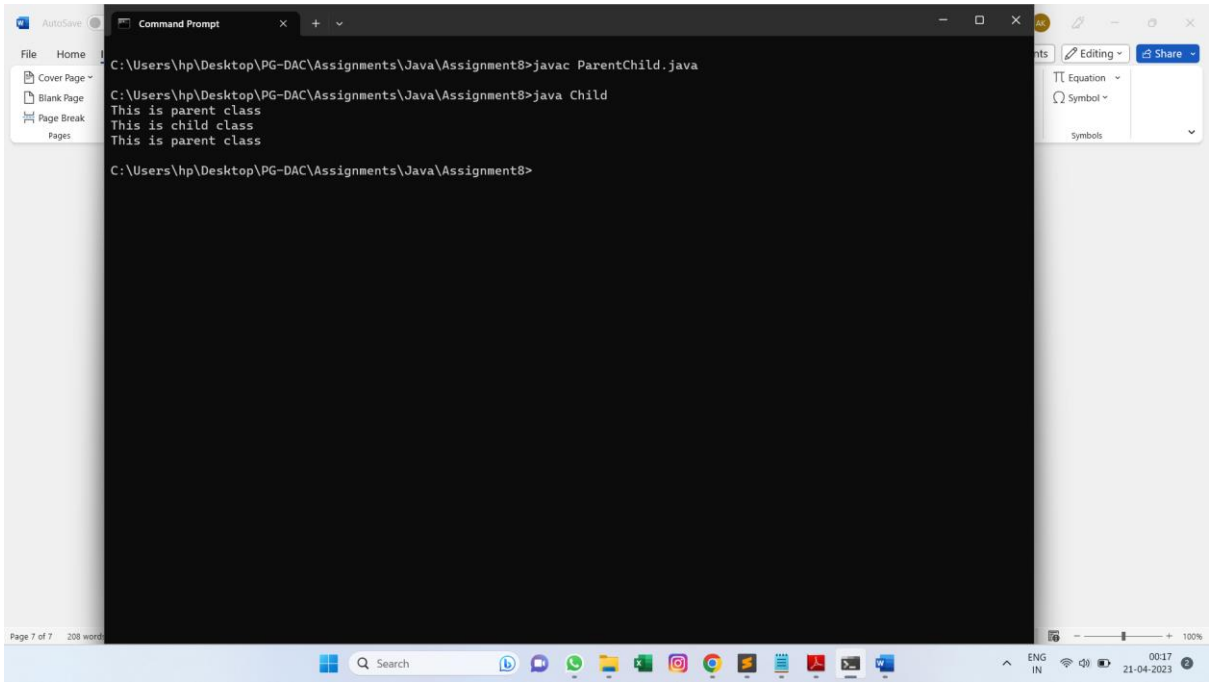
21-04-2023

Q4:

```
public class ParentChild{
public void printClass(){
        System.out.println("This is parent class");
}
}
class Child extends ParentChild{
public void printChild(){
                System.out.println("This is child class");
}
public static void main(String[] args) {
        ParentChild p1 = new ParentChild();
        Child c1 = new Child();
        p1.printClass();
        c1.printChild();
        c1.printClass();
}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac ParentChild.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Child
This is parent class
This is child class
This is parent class
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
File
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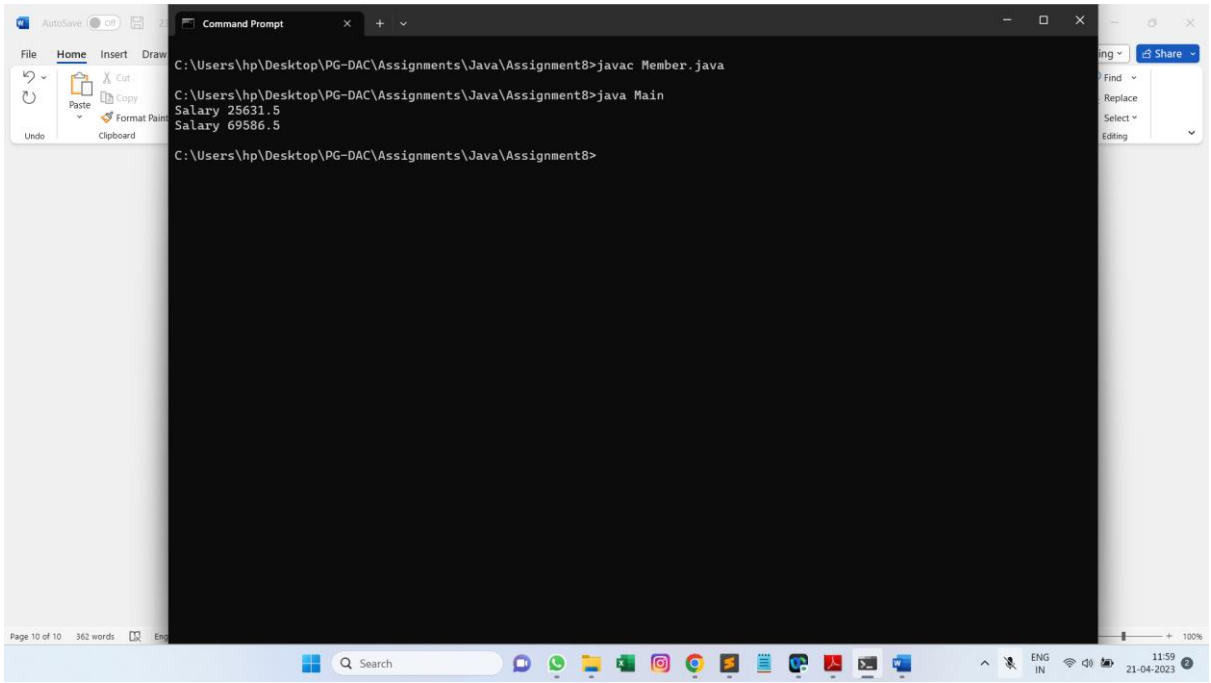
21-04-2023

Q5:

```
public class Member {
    private String name;
    private int age;
    private String phoneNumber;
    private String address;
    private double salary;

    public Member(String name, int age, String phoneNumber, String address,
double salary) {
        this.name = name;
        this.age = age;
        this.phoneNumber = phoneNumber;
        this.address = address;
        this.salary = salary;
    }

    public void printSalary() {
        System.out.println("Salary " + salary);
    }
}

class Employee extends Member {
    private String specialization;

    public Employee(String name, int age, String phoneNumber,
                    String address, double salary, String specialization) {
```

```
        super(name, age, phoneNumber, address, salary);
        this.specialization = specialization;
    }
}

class Manager extends Member{
    private String department;

    public Manager(String name, int age, String phoneNumber,
                   String address, double salary, String department) {
        super(name, age, phoneNumber, address, salary);
        this.department = department;
    }
}

class Main {
    public static void main(String[] args) {
        Employee employee = new Employee("Tom", 25, "555-555-55", "Home",
25631.5, "IT");
        Manager manager = new Manager("Ron", 30, "555-617-55", "Earth",
69586.5, "IT");
        employee.printSalary();
        manager.printSalary();
    }
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac Member.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Main
Salary 25631.5
Salary 69586.5
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
File
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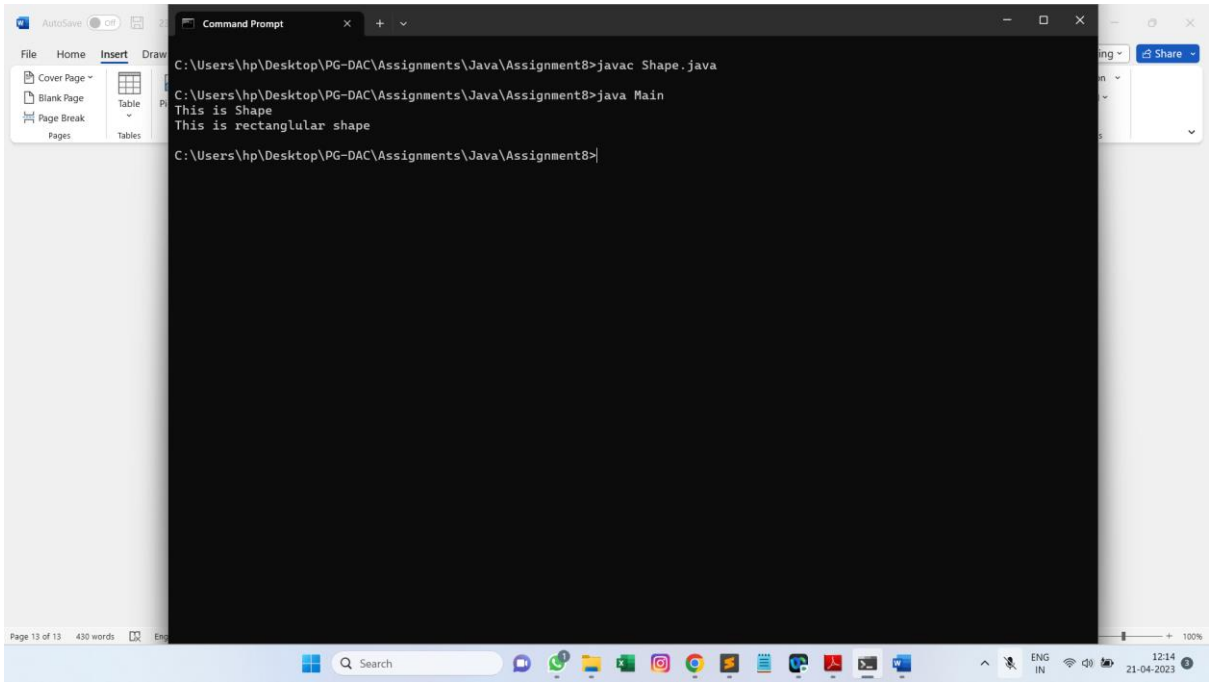
21-04-2023

Q6:

```
public class Shape{
	public void printShape(){
		System.out.println("This is Shape");
	}
}
class Rectangle extends Shape{
	public void printRectangle(){
		System.out.println("This is rectanglular shape");
	}
}
class Square extends Rectangle{
	public void printSquare(){
		System.out.println("Square is a rectangle");
	}
}
class Circle extends Shape{
	public void printCircle(){
		System.out.println("This is circlular shape");
	}
}
class Main{
	public static void main(String[] args) {
		Square sq1 = new Square();
		sq1.printShape();
		sq1.printRectangle();
```

```
        }
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac Shape.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Main
This is Shape
This is rectanglular shape
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
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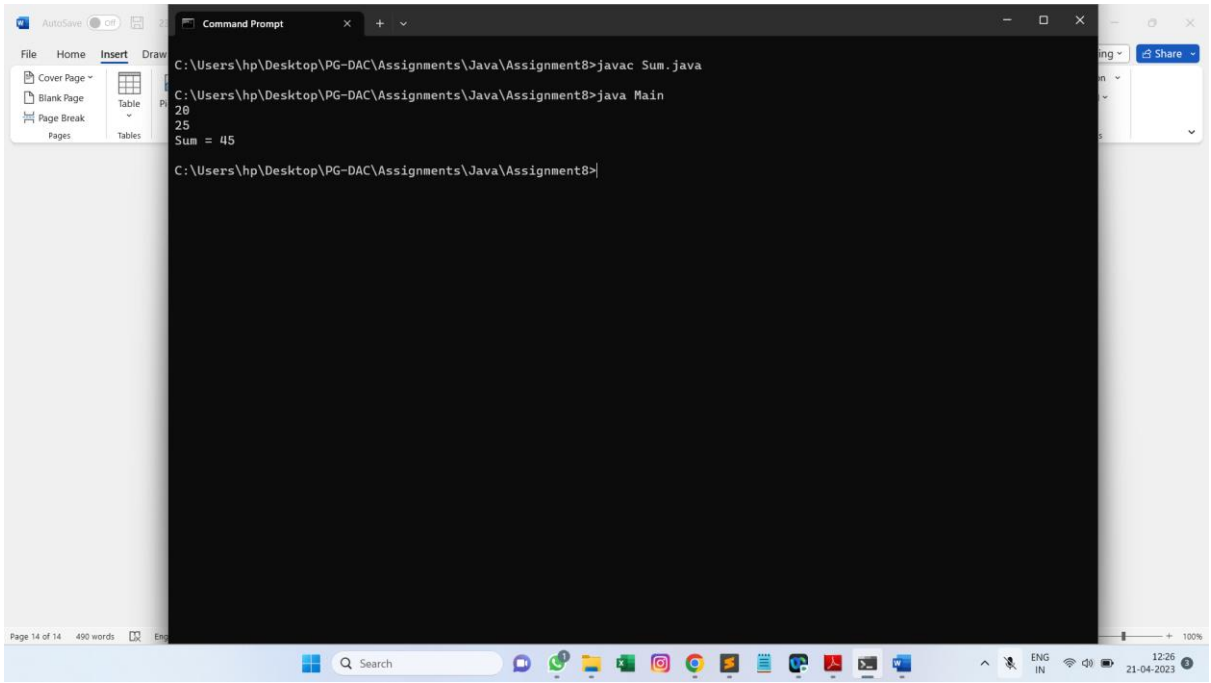
Q7:

```
import java.util.Scanner;
public class Sum{
	Scanner sc = new Scanner(System.in);
	int a = sc.nextInt();
	int b = sc.nextInt();
	int sum = a+b;
	public void Sum(int a, int b){
		this.a = a;
		this.b = b;
	}
	public void printSum(){
		System.out.println("Sum = "+sum);
	}
}
class Main{
public static void main(String[] args) {
	Sum s1 = new Sum();
	s1.printSum();
}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac Sum.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Main
20
25
Sum = 45
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
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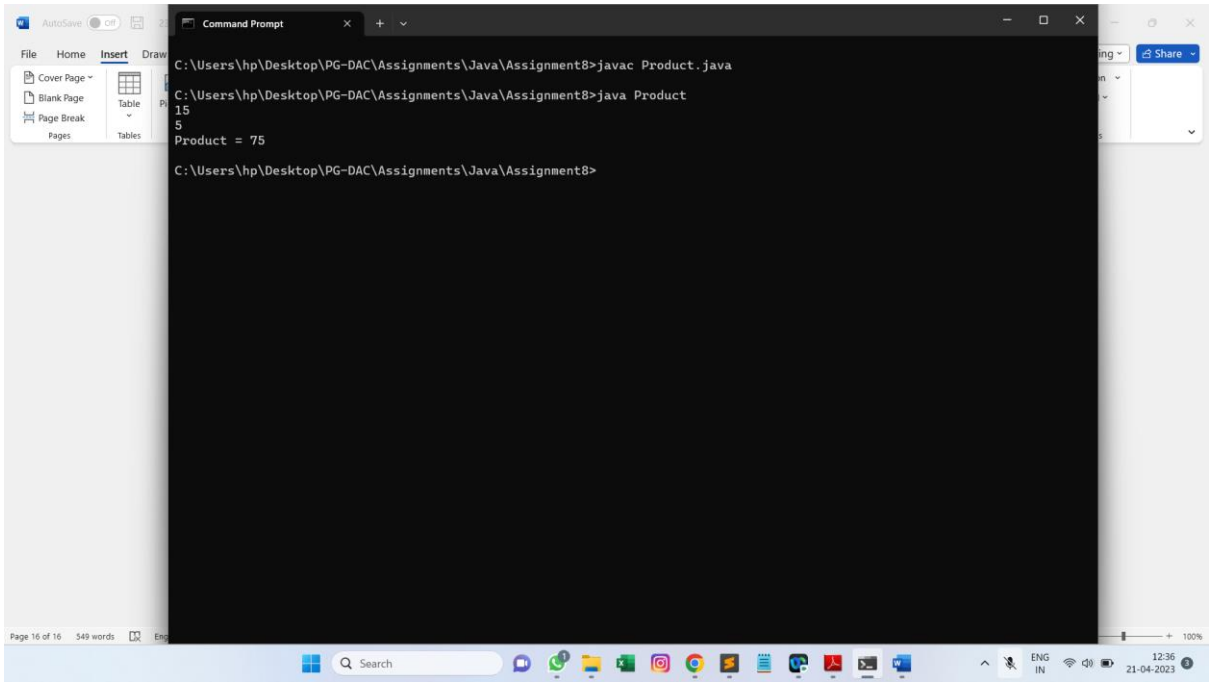
21-04-2023

Q8:

```
import java.util.Scanner;
public class Product{
	Scanner sc = new Scanner(System.in);
	int a = sc.nextInt();
	int b = sc.nextInt();
	int product = a*b;
	public void Product(int a, int b){
		this.a = a;
		this.b = b;
	}
	public int printProduct(){
		System.out.println("Product = "+product);
		return product;
	}
public static void main(String[] args) {
	Product p1 = new Product();
	p1.printProduct();
}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac Product.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Product
15
5
Product = 75
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
File
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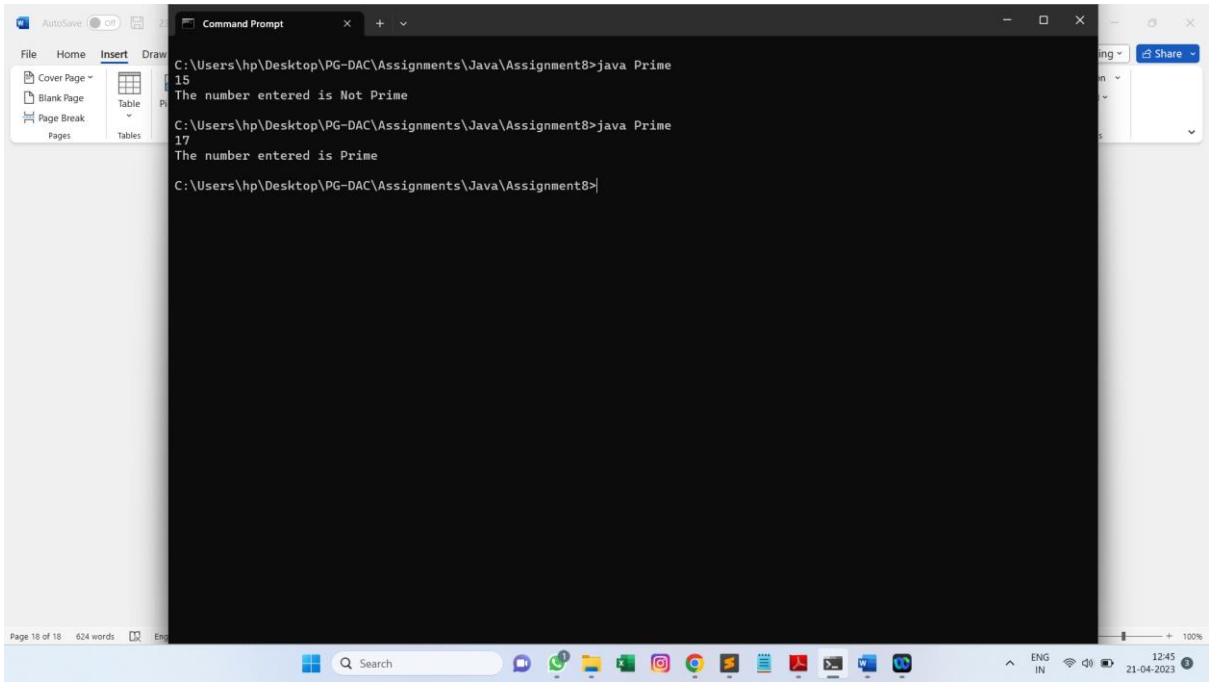
Q9:

```
import java.util.Scanner;
public class Prime{
	Scanner sc = new Scanner(System.in);
	int i = 2,count = 0;
	int n = sc.nextInt();
	public void Product(int n){
		this.n = n;
	}
	public void printPrime(){
		for(i = 2;i < n;i++){
			if(n % i == 0)
				count++;
		}
		if (count == 0)
		System.out.println("The number entered is Prime");
		else
		System.out.println("The number entered is Not Prime");
	}
public static void main(String[] args) {
	Prime p1 = new Prime();
	p1.printPrime();
}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Prime
15
The number entered is Not Prime
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Prime
17
The number entered is Prime
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
File
Home
Insert
Cover Page
Blank Page
Page Break
Table
Share
Search
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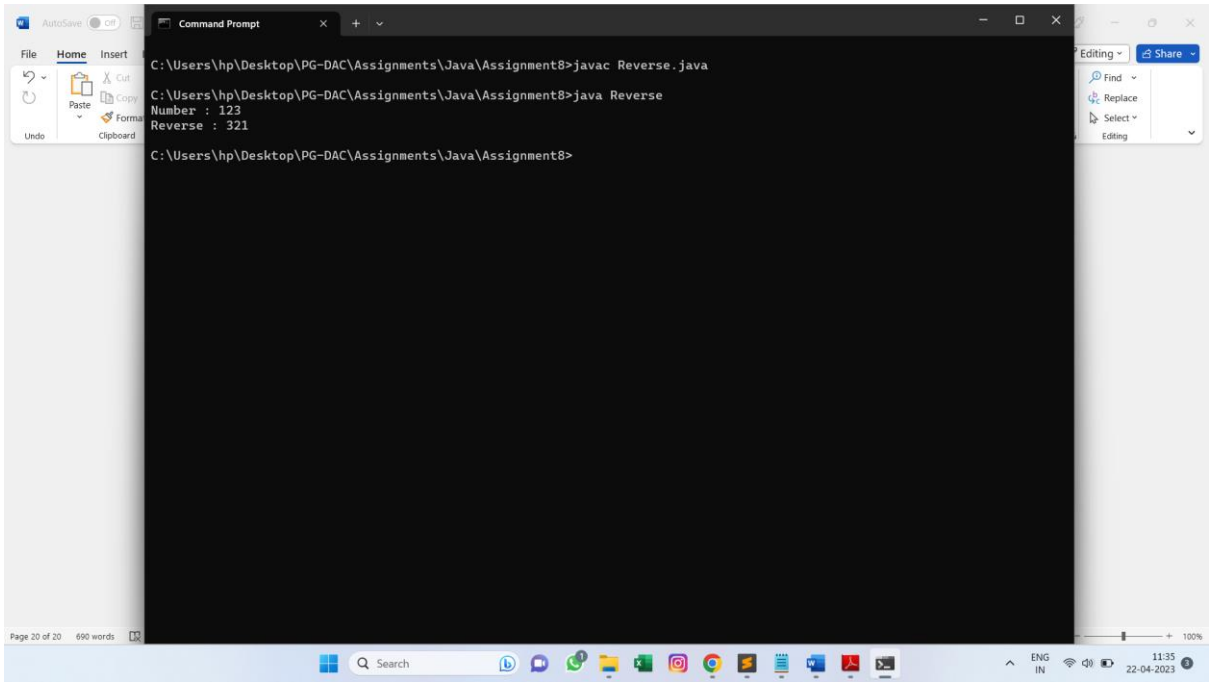
12:45
21-04-2023

Q10:

```
public class Reverse{
	int Number, i, digit, reverse = 0;

	public Reverse(int Number){
		this.Number = Number;
	}
	public void printReverse(){
		System.out.println("Number : "+Number);
		i = 0;
		while (Number > 0) {
			digit = Number % 10;
			reverse = reverse*10 + digit;
			Number = Number / 10;
		}
			System.out.println("Reverse : "+reverse);
	}
	public static void main(String[] args) {
		Reverse r1 = new Reverse(123);
		r1.printReverse();
	}
}
```


Command Prompt
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>javac Reverse.java
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>java Reverse
Number : 123
Reverse : 321
C:\Users\hp\Desktop\PG-DAC\Assignments\Java\Assignment8>
File
Home
Insert
Paste
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Copy
Undo
Clipboard
Editing
Share
Find
Replace
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