


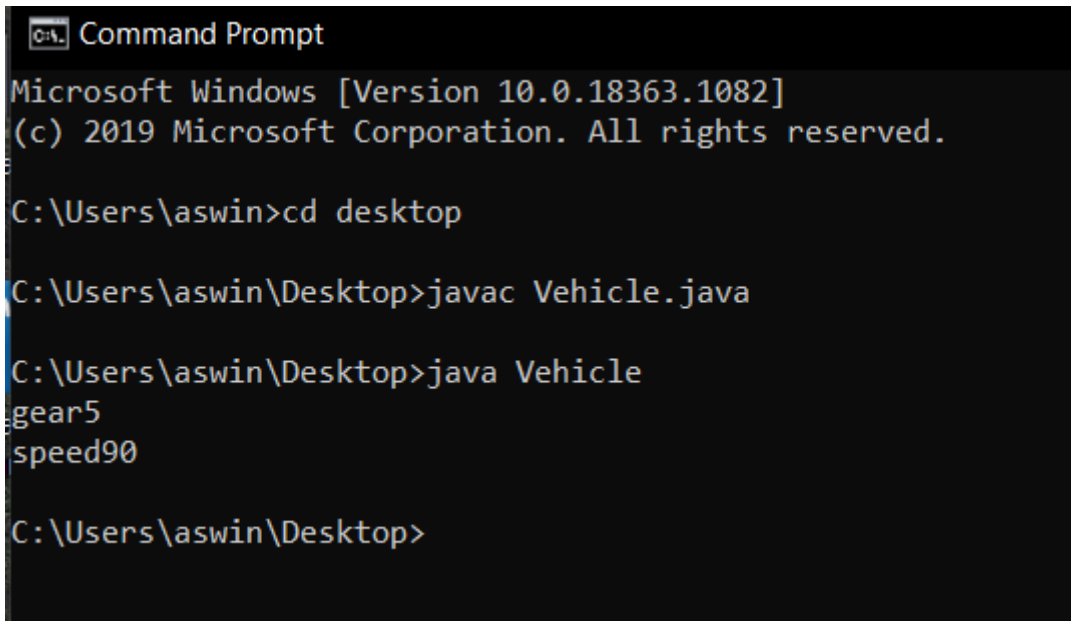
Ex 1

 Vehicle - Notepad

File Edit Format View Help

```
interface Engine
{
void changeGear(int a);
void speedUp(int a);
}
public class Vehicle implements Engine {
int speed;
int gear;
public void speedUp(int a) {
this.speed=a;
System.out.println("speed"+speed);
}
public void changeGear(int a) {
this.gear=a;
System.out.println("gear"+gear);
}
public static void main(String args[]) {
Vehicle objv=new Vehicle();
objv.changeGear(5);
objv.speedUp(90);
}
}
```

Result



```

C:\> Command Prompt
Microsoft Windows [Version 10.0.18363.1082]
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C:\Users\aswin>cd desktop

C:\Users\aswin\Desktop>javac Vehicle.java

C:\Users\aswin\Desktop>java Vehicle
gear5
speed90


C:\Users\aswin\Desktop>
```

Ex 2

 SharedConstants - Notepad

File Edit Format View Help

```
package myInterface;
public interface SharedConstants {
int NO = 0;
int YES = 1;
int MAYBE = 2;
int LATER = 3;
int SOON = 4;
int NEVER = 5;
}
```

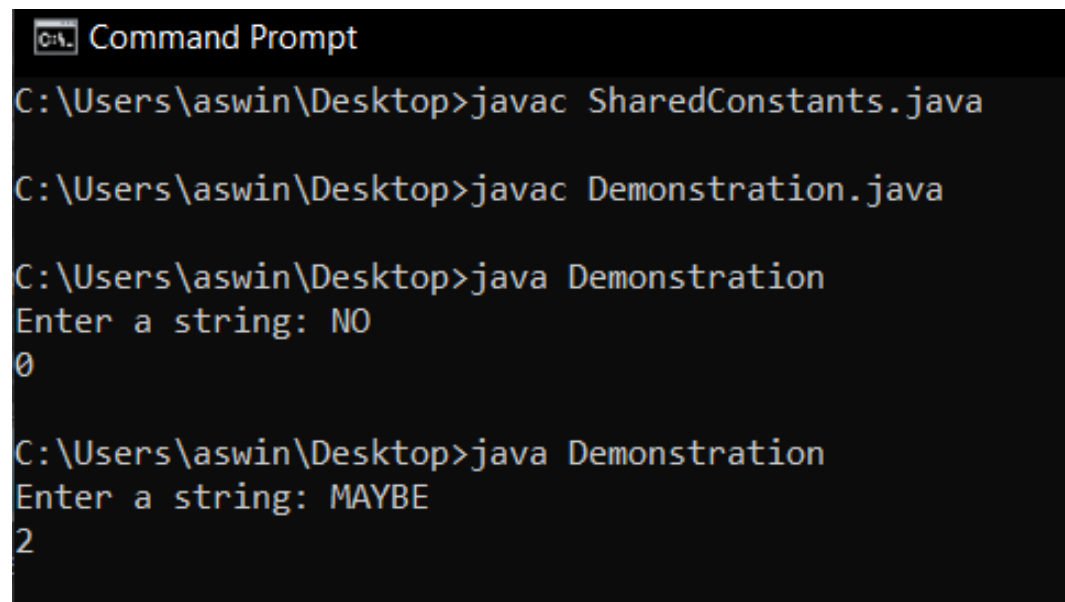
 Demonstration - Notepad

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```
import myInterface.SharedConstants;
import java.util.*;
class Demonstration implements SharedConstants {
Scanner sc= new Scanner(System.in);
void choice() {
System.out.print("Enter a string: ");
String str= sc.nextLine();
switch (str) {
case "NO":
System.out.println(NO);
break;
case "YES":
System.out.println(YES);
break;
case "MAYBE":
System.out.println(MAYBE);
break;
case "LATER":
System.out.println(LATER);
break;
case "SOON":
```

```
System.out.println(SOON);
break;
case "NEVER":
System.out.println(NEVER);
break;
}
}
public static void main(String args[]) {
Demonstration a = new Demonstration();
a.choice();
}
}
```

Result



```
C:\> Command Prompt
C:\Users\aswin\Desktop>javac SharedConstants.java
C:\Users\aswin\Desktop>javac Demonstration.java
C:\Users\aswin\Desktop>java Demonstration
Enter a string: NO
0
C:\Users\aswin\Desktop>java Demonstration
Enter a string: MAYBE
2
```

Ex 3



GeoAnalyzer - Notepad

File Edit Format View Help

```
package myInterface;
public interface GeoAnalyzer
{final static float pi = 3.14f;
public float area();
public float perimeter();
}
```



Demo - Notepad

File Edit Format View Help

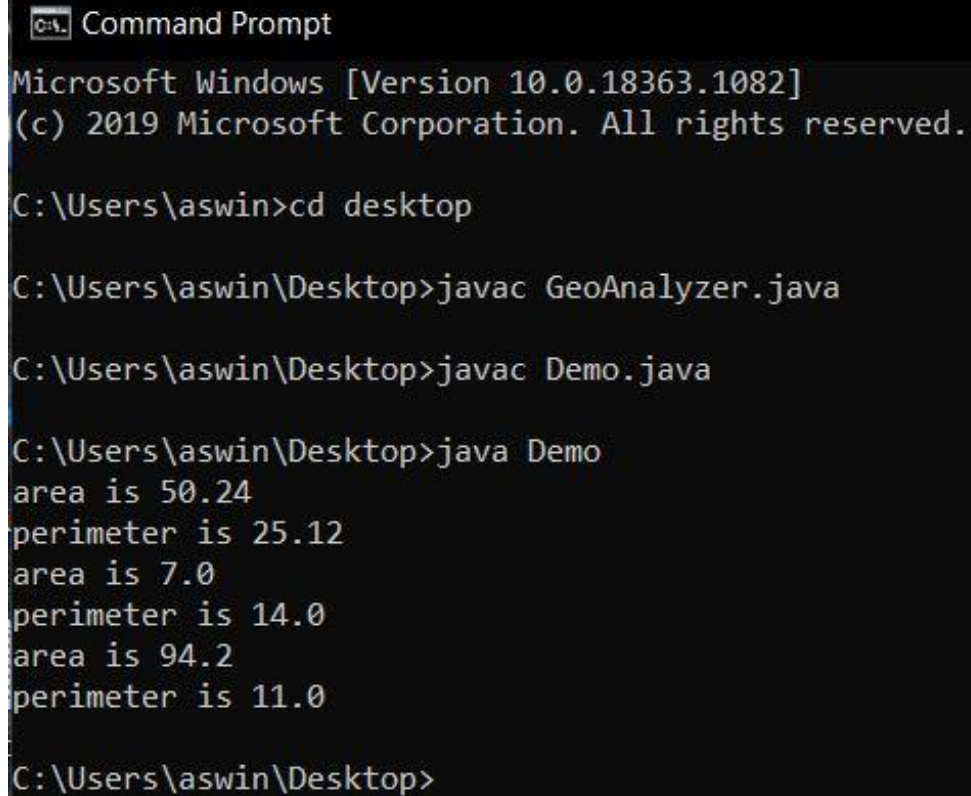
```
import myInterface.GeoAnalyzer;
import java.io.*;
import java.util.*;
class Circle implements GeoAnalyzer
{
float radius;
Circle(float r)
{
radius=r;
}
public float area()
{
return((float)(pi * radius * radius));
}
public float perimeter()
{
return((float)(pi * 2.0f * radius));
}
}
```

```

class Ellipse implements GeoAnalyzer
{
float a;
float b;
Ellipse(float x,float y)
{
a=x;
b=y;
}
public float area()
{
float result=((float)(pi * a * b));
return result;
}
public float perimeter()
{
float result=(a + b);
return result;
}
}
class Rectangle implements GeoAnalyzer
{
float length,breadth;
Rectangle(float a,float b)
{
length=a;
breadth=b;
}
public float area()
{
return(length + breadth);
}
public float perimeter()
{
return(2 * (length + breadth));
}
}
public class Demo{
static void display(float x,float y)
{
System.out.println("area is "+x);
System.out.println("perimeter is "+y);
}
public static void main(String args[])
{
Circle a=new Circle(4.0f);
Rectangle b=new Rectangle(3.0f,4.0f);
Ellipse c=new Ellipse(5.0f,6.0f);
display(a.area(),a.perimeter());
display(b.area(),b.perimeter());
display(c.area(),c.perimeter());
}
}

```

Result



```
Command Prompt
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C:\Users\aswin>cd desktop

C:\Users\aswin\Desktop>javac GeoAnalyzer.java

C:\Users\aswin\Desktop>javac Demo.java

C:\Users\aswin\Desktop>java Demo
area is 50.24
perimeter is 25.12
area is 7.0
perimeter is 14.0
area is 94.2
perimeter is 11.0

C:\Users\aswin\Desktop>
```