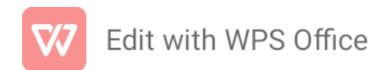
Part B

```
11) User defined package
package userdefined.pack;
public class Square_cube {
public int Cube(int r) {
return r*r*r;
public int Square(int r) {
return r*r:
}
package userdefined.pack1;
import java.util.Scanner;
import userdefined.pack.Square_cube;
class Calculate {
public static void main(String[] args) {
Scanner sc = new Scanner (System. in);
System. out.println("Enter the value");
int val = sc.nextInt();
Square_cube sq = new Square_cube();
int c = sq.Cube(val);
int p = sq.Square(val);
System. out. println("Cube"+c);
System. out.println("Square"+p);
12) Abstract class and method
package JP;
abstract class Figure {
double dim1;
double dim2;
Figure(double a, double b) {
dim1 = a;
dim2 = b;
abstract double area();
class Rectangle extends Figure {
Rectangle(double a, double b) {
super(a, b);
double area() {
System. out.println("Inside Area for Rectangle.");
return dim1* dim2;
class Triangle extends Figure {
Triangle(double a, double b) {
```



```
super(a, b);
double area() {
System. out. println("Inside Area for Triangle.");
return dim1* dim2/2;
public class AbstractAreas {
public static void main(String[] args) {
Rectangle r = new Rectangle(9, 5);
Triangle t = new Triangle(10, 8);
Figure figref;
figref = r;
System. out.println("Area is " + figref.area());
figref = t;
System. out.println("Area is " + figref.area());
}
13) Array Group
package JP;
import java.io.*;
class Employee {
int id;
String name;
Employee (int i, String n)
id=i;
name = n;
void displayData()
System.out.println(id+"\t"+name);
public class ArrayGroup {
public static void main(String args[]) throws IOException {
BufferedReader br = new BufferedReader (new
InputStreamReader(System.in));
Employee arr[] = new Employee [5];
for (int i=0; i<5; i++)
System. out.print("Enter id: ");
int id = Integer.parseInt(br.readLine());
System. out. print ("Enter name: ");
String name = br.readLine();
arr[i] = new Employee (id,name);
System. out.println("\nThe employee data is: ");
for(int i=0; i<arr.length; i++)</pre>
arr[i].displayData();
```



```
15) MyException
package JP;
import java.util.*;
class AmountLessThanRequiredException extends Exception {
Strina msa:
AmountLessThanRequiredException(String msg) {
super(msg);
public class MyException {
public static void main(String[] args) {
System. out.println("Enter the amount");
Scanner sc=new Scanner(System.in);
int withdrawAmount = sc.nextInt();
try {
if(withdrawAmount<=0) {</pre>
throw new AmountLessThanRequiredException("Entered amount less than minimum
withdrawal limit");
System. out. println ("WithDrawn amount is "+withdrawAmount);
catch(AmountLessThanRequiredException ex) {
System. out. println ("Userdefined exception");
System. out.println(ex.getMessage());
}
17)Thread
package JP;
class Thread1 extends Thread
public void run()
while(true)
System. out.println("Good morning");
Thread. sleep(1000);
catch(InterruptedException e)
class Thread2 extends Thread
public void run()
while(true)
System. out. println("Hello");
try
```



```
Thread. sleep(2000);
catch(InterruptedException e)
class Thread3 extends Thread
public void run()
while(true)
System. out.println("Welcome");
try
Thread. sleep(3000);
catch(InterruptedException e)
public class ThreadPgm {
public static void main(String[] args) {
Thread1 t1 = new Thread1();
Thread2 t2=new Thread2();
Thread3 t3=new Thread3();
System. out. println();
t1.start();
t2.start();
t3.start();
18) File input / output
package JP;
import java.io.File;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.IOException;
public class FileInputSt {
public static void main(String[] args) throws IOException {
File file=new File("C:\\users\\HP\\Desktop\\input.txt");
boolean result= file.createNewFile();
System. out. println ("File created");
String data= "Writing Sample data to input text file.";
try
FileOutputStream output = new FileOutputStream("C:\\Users\\HP\\Desktop\\input1.txt");
byte[] array = data.getBytes();
System. out. println ("Writing data");
output.write(array);
output.close();
System. out. println ("Written success");
System. out. println("----");
```



```
catch(Exception e) {
e.getStackTrace();
try
FileInputStream input = new FileInputStream("C:\\Users\\HP\\Desktop\\input1.txt");
System. out. println ("Reading the Data from the file input: ");
System. out. println ("Contents of file");
System. out.println("-----");
int i = input.read();
while(i!=-1){
System. out. print((char)i);
i=input.read();
input.close();
catch (Exception e)
e.getStackTrace();
20)Applet
package JP;
import java.applet.*;
import java.awt.Graphics;
import java.awt.*;
public class AppletLife1 extends Applet {
public void init() {
setBackground(Color.BLUE);
System.out.println("init() is invoked");
public void start() {
System. out. println("Start() is invoked");
public void paint(Graphics g) {
System.out.println("Paint() is invoked");
public void stop() {
System.out.println("Stop() is invoked");
public void destroy() {
System.out.println("Destroy() is invoked");
<!DOCTYPE html>
<html>
<head>
<title>Applet Example</title>
</head>
<br/>body>
<applet code="AppletLife1.class" width="300" height="200">
Applet demo <code>applet</code> tag.
</applet>
</body>
</html≥
```

