Question 1: trace

```
public class Exam1{
static int num=9, sum=0;
public static void main(String
args[]){
for(int i=0;i<1;i++){
int num=0;
method(num);
System.out.println(num+" "+sum);
}

for(int i=0;i<2;i++){
num++;
method(num);
System.out.println(num+" "+sum);
sum++;
}
System.out.println(num+" "+sum);

}
public static void method(int num){
num++;
sum++;
System.out.println(num+" "+sum);
}}
```

```
public class Exam2{
public static void main(String args[]){
point p1=new point();
p1.x=1;
p1.y=2;
p1.z=3;
point p2=new point();
p2.x=8;
p2.y=5;
p2.z=0;
point p3=p2;
p2=p1;
System.out.println(p1.x+" "+p1.y+" "+
p1.z);
System.out.println(p2.x+" "+p2.y+" "+
p2.z);
System.out.println(p3.x+" "+p3.y+" "+
p3.z);

}}
class point{
int x,y,z;

}
```

errors in the following code segments (1 error each):

```
}
public static void method(int num){
num++;
sum++;
System.out.println(num+" "+sum);
}}
```

```
System.out.println(p3.x+" "+p3.y+" "+
p3.z);

}}
class point{
int x,y,z;

}
```

Question 2: Find and correct errors in the following code segments (1 error each):

`int [] list={1,2,3};`
`System.out.print(list[Math.pow(0,1)]);`
	`Scanner read;`
	`read= new Scanner(System.in);`
	`char c=read.next();`

`Time T;`
`T.hours=9;`
	`public int m(int [] b){`
	`int[] x={1,2,3};`
	`return x;`
	`}`

Question 3:

1. Write a statement that print the odd elements of an array
2. Write a java statement that print the second max number in an array of integers
3. Write a method that receive array of double, then create array of integer containing the same numbers as the received array (only the integer part) then, return this array of integer.
4. Write a method that receive two integers, and return true if the first number is divisible by the second, false otherwise.

Question 4:

A) From the UML in front of you write the corresponding class. The class methods perform the following :

Student
- name : String - id : int[] - dateofBirth: String - graduted: boolean - GPA : double - gender : char
+ student(n:String ,i: int [], date:String, grd: boolean , gpa: double , g:char) + getId(): int[] + getAge(currentDate :String): double + isGraduated ():boolean + getGPA(): double + getGender (): char

dateofBirth is staring that store the date of the birth in 'mm-yyyy' format

the method getAge calculates and return age of student.

```
- id : int[]
- dateofBirth: String
- graduted: boolean
- GPA : double
- gender : char
+ student(n:String ,i: int [], date:String, grd: boolean ,
gpa: double , g:char)
+ getId(): int[]
+ getAge(currentDate :String): double
+ isGraduated ():boolean
+ getGPA(): double
+ getGender (): char
```

dateofBirth is staring that store the date of the birth in 'mm-yyyy' format

the method getAge calculates and return age of student.

Hint: if the entered month is greater than the current one then you calculate it like this

The_months=(12-Month)+current_Month

b) Write a class testStudent that contains a main method, then:

- create 2 object of the class student.

- print student information (including its age)