PROGRAMME :
DIPLOMA IN INFORMATION TECHNOLOGY
(DIGITAL TECHNOLOGY)(DDT)

COURSE:
DFP30243- OBJECT ORIENTED PROGRAMMING

ASSESSMENT	**CASE STUDY 1**	
NO	**REGISTRATION NO**	**NAME**
1.	32DDT20F2029	MUHAMMAD AFIQ MUHAIMIN BIN MOHD ZAINI
2.	32DDT20F2031	MUHAMMAD AZEEM AMIRUL BIN MOHD ZULKEFLEE
PROGRAMME	DDT3A	

INSTRUCTIONS :

1. Answer **ALL** the questions.
2. Submission Date : ……

CODE / COURSE	**DFP30243-OBJECT ORIENTED PROGRAMMING**	**CASE STUDY**	**1 ~~/ 2~~**
PROGRAM / CLASS	**DDT3A**	**DURATION**	**3 HOURS**
STUDENT'S NAME	**MUHAMMAD AFIQ MUHAIMIN BIN MOHD ZAINI** **MUHAMMAD AZEEM AMIRUL BIN MOHD ZULKEFLEE**	**CLO**	**2P**
REG. NO.	**32DDT20F2029** **32DDT20F2031**	**TOTAL MARKS**	**/100**
LECTURER'S NAME	**PN. HAZLEENA BINTI OSMAN** **PN. RODZIAH BINTI IBRAHIM**		

Topic: Build Classes in Java program.

Learning Outcomes: At the end of this case study, student able to display skills to use graphical/ visual data to visualize the concept of OOP

Answer the questions based on the following requirements:

QUESTION 1

Car is a real world object and it has its own characteristics like color of the car, model of the car and engine capacity. We can drive the car and stop it.

a. Analyze and design all the information and draw an UML class diagram.

Answer:

Car
+carColor:String +carModel:String +carengineCapacity:int
cardriveSpeed():float carstopCapabilities():float

b. Write a class definition for class Car by using java
c. Identify components of a class; class declaration,variable declaration and assignments,comments and methods.

Answer:

```
//Class Declaration
class Car{
    //Start of Variable Declaration
    public String carColor;
    public String carModel;
    public int carengineCapacity;
    //End of Variable declaration
    //First method declaration
    public float cardriveSpeed()
    {

    }
    //Second method declaration
    public float carstopCapabilities()
    {

    }
}
```

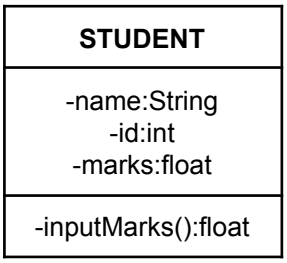
QUESTION 2

Given the following figure:

a. Analysis and design all the information using class diagram.

Class	Data	Method
Student	name,id,marks	inputMarks()

Answer:



b. Write a java program based on class diagram you created
c. Identify components of a class; class declaration,variable declaration and assignments,comments and methods.

Answer:

b.

```
class Student{
private String name;
private int id;
private float marks;
private void float inputMarks(){
}
}
```

c.

```
//Class Declaration

class Student
{
//Constructor Declaration of Class

private String name;
private int id;
private float marks;
private void float inputMarks(){
}
//method implementation
}
```