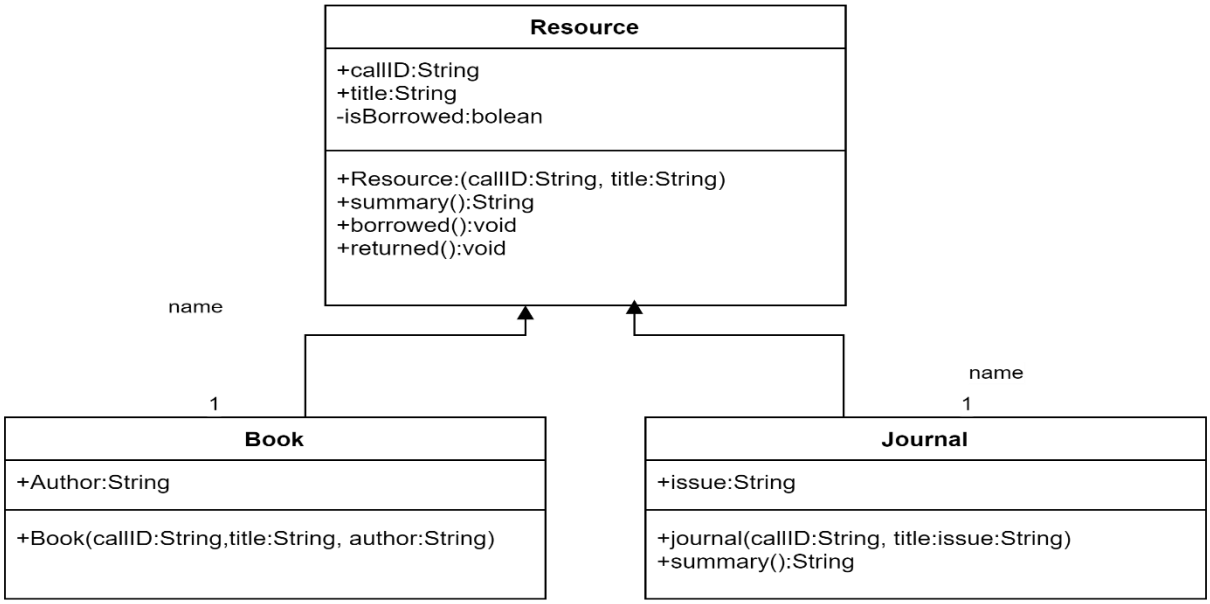
OBJECT ORIENTED PROGRAMMING

STUDENT NAME:

REGISTRATION NUMBER:

Question one

Study the UML class diagram below and answer the questions that follow



Write the Java codes that are represented by the following elements in the UML Class diagram above for the class Resource

a) *-isBorrowed:Boolean*

b) *+Resource(callID:String,title:String)*

c) *+summary():String*

d) Write down the first line of the code that you would write in order to create a class book as shown in the UML class diagram above

2. Assuming that the class Resource was an interface, in the java code for this interface, how would you write

a) *+summary (): String*

b) *+Resource (callID:String, title:String)*

c) Again, assuming Resource to bee an interface, Nabbanja wrote the following code defining a concrete class Book to make Resource a concrete class

Public class …… Resource {

}

Fill in the gap above with one word. (2 marks)

Question two

a) Define Object Oriented Programming clearly (2 marks)

b) Given the following code use it to answer the question that follow **Space x= new Space** (TRUE);

I. Write short notes about the x that help to understand what it is (3 marks)

II. What is the significance of the programming statement bolded in (b) above? (3 marks)

III. Write down two separate programming statements that would be equivalent to the bolded programming statement in (b) above (3 marks)

IV. Define a constructor that is relevant to the bolded programming statement in (b) (3marks)

V. In relation to the bolded programming statement in (b) above, what would the statement **x.AddTwo ();** mean; Explain your answer (3 marks)