

CSE 103

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Subject: Assignment from book

Chapter No:: 1

Section No:: 2

Exercise No:: 3

**Question:** You can graduate only if you have completed the requirements of your major and you do not owe money to the university and you do not have an overdue library book. Express your answer in terms of  $g$ : "You can graduate,"  $m$ : "You owe money to the university,"  $r$ : "You have completed the requirements of your major," and  $b$ : "You have an overdue library book."

**Answer:** We know,  $p$  only if  $q$  means  $p \rightarrow q$ . Here,  $p \equiv g$  and  $q \equiv r \wedge (-m) \wedge (-b)$ . Therefore,  $g \rightarrow (r \wedge (-m) \wedge (-b))$