Suppose the tax rate is 0% for taxable income less than $0 ( no tax refunds for losses and no NOL carryback or carry forwards). For positive taxable income taxable income up to and including $25,000, the tax rate is 15%; for taxable income greater than $25,000 but less than $50,000, the tax rate is 25%; and for taxable income greater than $50,000, the tax rate is 34%. Calculate the expected tax payable for the following and Explain your result:

1. A 50% chance of $100,000 and a 50% chance of loss of $50,000.
2. A 50% chance of $75,000 and a 50% chance of loss of $25,000.