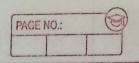
ISLR 3.7-3 g=gpa l=level (1/0) 1=19 gi, gl 7= 50 + 20g + 0.07 i + 35l + 0.01 gi - logl  $\frac{4}{c} = 85 + 20g + 0.07i + 0.01gi - 10g$  = 85 + g(10 + 0.08i)College · (l=1) 9 = 50 + 20 x + 0 0 7 x + 85 x + 0 0 0 1 x. High Th= 50 + g (20 + 0.08i) (l=0) 85 + 109 + 0.089i > 50 + 209 + 0-08gi 35 > 109 9 6 3.5 : if 973.5, yh > ye (iii) For a fixed value of 18 & GPA, high school than high school graduates, provided that the GPA is high enough



(b) 1=110 l=1 9=4

> $\frac{9}{16} = 85 + 4 \left( 10 + 0.08 \left( 1101 \right) \right)$ = 85 + 75.2

> > = 160.2

(c) False. The value of the coefficient for an interaction term direct provide any evidence for or against the chance of an interaction effect. To prove this possibility we have to formulate a hypothesis and compute p-value for the coefficient of the interaction term.

Given: 
$$\hat{y}_{1} = x_{1} \hat{\beta}$$
 $= x_{1} \hat{\beta}$ 
 $= x_{1} \hat{\beta}$