(Use loanapp.dta in Wooldridge Textbook Data). Approve=1 if loan application is approved, and 0 if it is not, Loanamt= $ amont of mortgage, Apr=$ appraisal value of the property, Loanprc= is loan to price ration Married=1 if the applicant is married, and 0 otherwise

$approve = \beta_0 + \beta_1 loanamt + \beta_2 apr + \beta_3 loanprc + \beta_4 married + u$

a. Use Linear Probability Model (LPM) to predict the probability of approval. What proportion of your predictions falls in 0 and 1 intervals? Calculate and interpret count R^2 (proportion of correct predictions)

b. Estimate the parameters (coef) using the Logit model. Find P(approve=1|X) when loanamt= 200, apr= 250, loanprc= 0.8, and married=0. Find and interpret the odds ratio. How does the odds ratio change when married=1? How do you interpret the change? Manually calculate and interpret the marginal effect of married and loanamt.