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### Additional Empirical Exercise 4.1

The data file **CPS12** contains data for full-time, full-year workers, age 25–34, with a high school diploma or B.A./B.S. as their highest degree. A detailed description is given in **CPS12\_Description**. In this exercise, you will investigate the relationship between a worker's age and earnings. (Generally, older workers have more job experience, leading to higher productivity and earnings.)

- a. Run a regression of average hourly earnings (*AHE*) on age (*Age*). What is the estimated intercept? What is the estimated slope? Use the estimated regression to answer this question: How much do earnings increase as workers age by 1 year?
- b. Bob is a 26-year-old worker. Predict Bob's earnings using the estimated regression. Alexis is a 30-year-old worker. Predict Alexis's earnings using the estimated regression.
- c. Does age account for a large fraction of the variance in earnings across individuals? Explain.