$$H_0 : \beta_{age} = 0 \text{ vs } H_1 : \beta_{age} \neq 0$$

$$P_{age} = 0.21907$$

$$\alpha = 5\% = 0.05$$

$P_{age} > \alpha \Rightarrow$ коэффициент незначим! H_0 не отвергается!

$$P_{totwrk} = 1.129e-13 = 1.129 * 10^{-13} = 0.0\ldots01129$$

$P_{totwrk} < \alpha \Rightarrow$ влияние $totwrk$ значимо

$$n = 532,\ k = 8,\ df = n - k - 1 = 523$$

~~$log(wage)$ на age + остальное~~

$\hat{\beta}_{age} = 0.02125292 \approx 0.02 :\ age + 1 \Rightarrow wage + \beta_{age} * 100\% = wage + 2\%$

$$n = 935,\ k = 5,\ df = n - k - 1 = 929$$

$$F - test,\ k = 7,\ n = 706$$

$$H_0 : \beta_{totwrk} = \beta_{age} = \beta_{male} = \beta_{marr} = \beta_{smsa} = \beta_{south} = \beta_{union} = 0$$

$$F_{stat} = 15.069,\ P < 2.2e-16 = 2.2 * 10^{-16}$$

$P < 0.05 \Rightarrow H_0$ отвергаем, регрессия значима

$$df1 = k = 7,\ df2 = n - k - 1 = 698$$

$$F_{cr} = 2.022681$$

$F_{stat} > F_{cr} \Rightarrow$ регрессия значима!

$\hat{sleep} = \hat{\beta}_0 + \hat{\beta}_{totwrk} * 2300 + \hat{\beta}_{age} * 38 + \hat{\beta}_{smsa} * 1 + \hat{\beta}_{south} * 0 = 3186.11$ (мин\нед)

$log(output)$ на $log(capital), log(labour)$

$\hat{log}(output) = \hat{\beta}_0 + \hat{\beta}_1 * log(capital) + \hat{\beta}_2 * log(labour)$