QSS Analytics

Python ilə Data Analitikası. Homework of Session 3

Hypothesis testing:
https://www.youtube.com/watch?v=JV2-WHzreFo&list=PLIeGtxpvyG-IZRHcZcOy12jp7ywuRbE7l

Matplotlib:
https://www.youtube.com/watch?v=a9UrKTVEeZA&t=169s
https://www.youtube.com/watch?v=q7Bo_J8x_dw&list=PLQVvvaa0QuDfefDfXb9Yf0la1fPDKluPF

Task

Researchers are interested in the mean age of a certain population. A random sample of 10 individuals drawn from the population of interest has a mean of 27. Assuming that the population is approximately normally distributed with variance 20, can we conclude that the mean is different from 30 years ? (α=0.05) . If the p - value is 0.0340 how can we use it in making a decision?

Key takeaways: n = 10, mean = 27, variance = 20, alpha : 0.05

Hyphothesis:

H0 : μ=30

HA: μ 30

Should we reject null hypothesis?