CENG 222

Statistical Methods for Computer Engineering

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Assignment 3

Student Information

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A

I calculated probabilty that more than 25 fishs in this part. I found size with using Monte Carlo study.
I looked table A4 for find try number N, so observe that $N = 38416$
Then, i used *poissrnd* function to find number of catched fish in three hours,like *poissrnd*(12)(Poisson Number = 4, time = 3 hours)
Afterwards, i calculated weight of one fish with rejection method and i done this calculation *poissrnd*(12) time. In this moment, i have total weight for one try and i could decide total weight bigger than 25 kg or not. I save all bigger conditions.
Then, i calculated this process 38416 time. I summed all total weight for all tries.
Finally, i found probabilty with dividing number of all bigger condition with number of all tries(38416).

B

I have founded all total weight in part A.
I divide all total weight to number of tries(38416) and i obtain average easily.

C

For calculate standard deviation, i save weight of all tries one-to-one in array. I summed all difference of average from array elements one-to-one. I find squrate root of sum/(n-1) where n-1 = 38415. So, i obtained standard deviation.