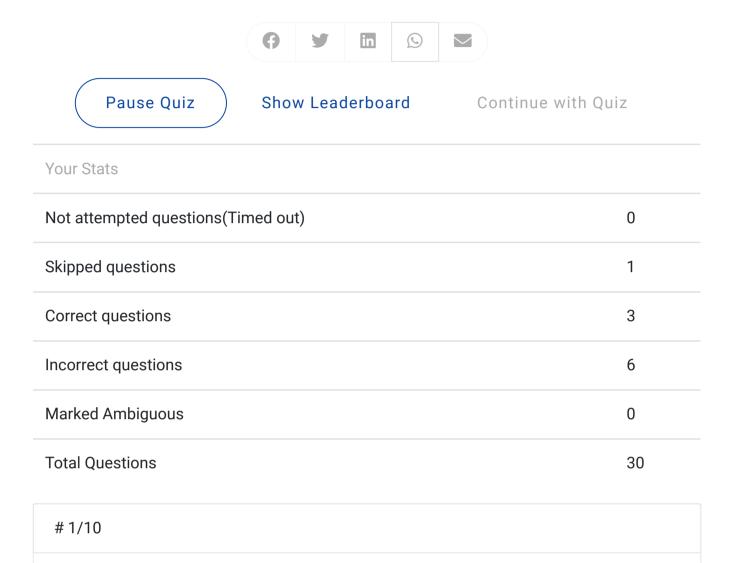
Incorrect answer! X

# Review your last 10 questions

6 days, 4 hours remaining until quiz ends.



A new medicine X was developed to tuberculosis

The following hypotheses were formed:

Null Hypotheses: Medicine X cures tuberculosis

Alternate Hypotheses: Medicine X does not cure tuberculosis

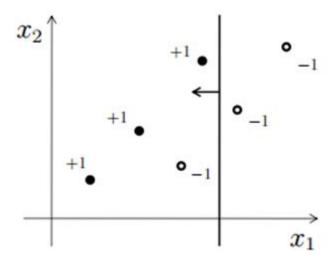
Later it is found that medicine X does not cure tuberculosis, but was still accepted. What kind of error is this?

- Type I
- Type II
- Both Type I and Type II
- · Cannot be determined



# 2/10

Consider the following figure for answering the next few questions. In the figure, X1 and X2 are the two features and the data point is represented by dots (-1 is negative class and +1 is a positive class). And you first split the data based on feature X1(say splitting point is x11) which is shown in the figure using vertical line. Every value less than x11 will be predicted as positive class and greater than x will be predicted as negative class.



Which of the following splitting point on feature x1 will classify the data correctly?

- Greater than x11
- Less than x11
- Equal to x11
- None of above

Incorrect

## # 3/10

A data scientist trained a SVM model but he want to avoid misclassified samples. What should be the value of hyper parameter c (loss)

- High
- low
- It doesn't depend on c
- None

Incorrect

## # 4/10

PAM algorithm is used to implement \_\_\_\_ clustering?

- K-means
- K-means ++
- K-medoids
- Agglomerative clustering

Incorrect

# 5/10

Which of the following is a disadvantage of Local outlier factor?

- It can take any value between -∞ to +∞
- It can take any value between 0 to +∞
- · It takes density of clusters into consideration
- Both a and c

Incorrect

#### # 6/10

What happens if we choose all the variables from a dataset while building the individual trees in the Random Forest?

- · Gives us the best solution while solving random forest
- Not a good idea, we will end up with overfitted model
- Impossible to choose all the variables in a tree
- Not a good idea, we will end up with almost the same tree

Correct

# # 7/10

Let x be the weight of a random population, x is normally distributed with an unknown mean and standard deviation=3. Take n=25,  $\alpha$ =0.05.

Z value as we know will be equal to 1.64.

H(null):  $\mu$ =150

H(a): μ>150

What is the p value, when the sample mean is 152.9 and the population mean is 155.

_ z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319	.5359
0.1	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714	.5753
0.2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103	.6141
0.3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480	.6517
0.4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844	.6879
0.5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190	.7224
0.6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517	.7549
0.7	.7580	.7611	.7642	.7673	.7704	.7734	.7764	.7794	.7823	.7852
8.0	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106	.8133
0.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365	.8389
1.0	.8413	.8438	.8461	.8485	.8508	.8531	.8554	.8577	.8599	.8621
1.1	.8643	.8665	.8686	.8708	.8729	.8749	.8770	.8790	.8810	.8830
1.2	.8849	.8869	.8888	.8907	.8925	.8944	.8962	.8980	.8997	.9015
1.3	.9032	.9049	.9066	.9082	.9099	.9115	.9131	.9147	.9162	.9177
1.4	.9192	.9207	.9222	.9236	.9251	.9265	.9279	.9292	.9306	.9319
1.5	.9332	.9345	.9357	.9370	.9382	.9394	.9406	.9418	.9429	.9441
1.6	.9452	.9463	.9474	.9484	.9495	.9505	.9515	.9525	.9535	.9545
1.7	.9554	.9564	.9573	.9582	.9591	.9599	.9608	.9616	.9625	.9633
1.8	.9641	.9649	.9656	.9664	.9671	.9678	.9686	.9693	.9699	.9706
1.9	.9713	.9719	.9726	.9732	.9738	.9744	.9750	.9756	.9761	.9767
2.0	.9772	.9778	.9783	.9788	.9793	.9798	.9803	.9808	.9812	.9817
2.1	.9821	.9826	.9830	.9834	.9838	.9842	.9846	.9850	.9854	.9857
2.2	.9861	.9864	.9868	.9871	.9875	.9878	.9881	.9884	.9887	.9890
2.3	.9893	.9896	.9898	.9901	.9904	.9906	.9909	.9911	.9913	.9916
2.4	.9918	.9920	.9922	.9925	.9927	.9929	.9931	.9932	.9934	.9936
2.5	.9938	.9940	.9941	.9943	.9945	.9946	.9948	.9949	.9951	.9952
2.6	.9953	.9955	.9956	.9957	.9959	.9960	.9961	.9962	.9963	.9964
2.7	.9965	.9966	.9967	.9968	.9969	.9970	.9971	.9972	.9973	.9974
2.8	.9974	.9975	.9976	.9977	.9977	.9978	.9979	.9979	.9980	.9981
2.9	.9981	.9982	.9982	.9983	.9984	.9984	.9985	.9985	.9986	.9986
3.0	.9987	.9987	.9987	.9988	.9988	.9989	.9989	.9989	.9990	.9990
3.1	.9990	.9991	.9991	.9991	.9992	.9992	.9992	.9992	.9993	.9993
3.2	.9993	.9993	.9994	.9994	.9994	.9994	.9994	.9995	.9995	.9995
3.3	.9995	.9995	.9995	.9996	.9996	.9996	.9996	.9996	.9996	.9997
3.4	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9997	.9998

Which is the correct option?

- 0.9992
- 0.9997
- 0.9996
- 0.9995

Correct

# 8/10

Decision Trees can be unstable and can be biased at times

In case we want to reduce the variance in a Decision Tree, what can we do?

- Bagging
- Pruning
- Boosting
- Both 1 and 2
- 1,2 and 3
- None of the above

Skipped

## # 9/10

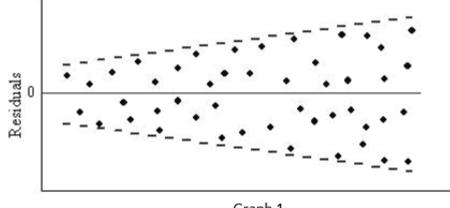
If a datapoint lies on the hyperplane, obtained using logistic regression, what will be the sigmoid value of its distance from the decision boundary?

- 1
- 0
- 0.5
- None of the above

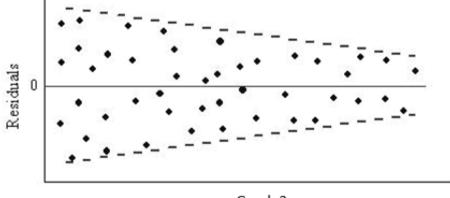


## # 10/10

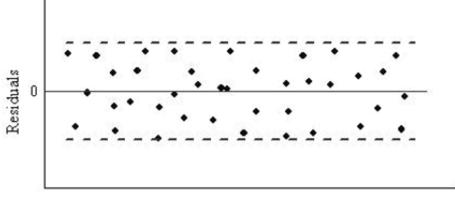
Three data science students fitted their respective regression model on different datasets and their residuals were calculated an plotted in the graphs below.



Graph 1



Graph 2



Graph 3

Using the above graphs, can you conclude that which graph satisfies the assumption of homoscedasticity (if any).

- Graph 1
- Graph 2
- Graph 3

Datamin | Review • Cannot conclude anything Incorrect i Suggested reading Simple Introduction to Logistic Regression in R Pause Quiz **Show Leaderboard** Continue with Quiz **Analytics Vidhya Data Scientists** Companies About Us Post Jobs Blog Our Team <u>Hackathon</u> <u>Trainings</u> Hiring Hackathons <u>Careers</u> <u>Discussions</u> <u>Advertising</u> Contact us Apply Jobs **Download App** Visit us GET IT ON Google Play in Sign up to our newsletter your email address

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