**Type I**

A test is administered annually. The test has a **mean score of 100** and a **standard deviation of 40**.

If Rohit's z-score is 1.5, what was his score on the test?

From the z-score equation, we know z = (X - μ) / σ where z is the z-score, X is the value of the element, is the mean of the population, and is μ σ the standard deviation.

Solving for Jane's test score (X), we get X = (z \* σ) + μ = (1.5 \* 40) + 100 = 60 + 100 = 160

**Type III**

Build a Logistic Regression model with the following parameters to predict whether a customer will purchase the product or not.

Parameters:

* random\_state for train and test split= 2012,
* test\_size = 0.30.

Leave all other parameters to default values.

Dataset: [Purchase-Report](https://github.com/insaid2018/Sample-CDF-Certification/tree/master/Purchase-Report)

Kindly go through data description available in the link.

Given the following values of the independent variables:

* 'Age': 32
* 'EstimatedSalary': 40000
* 'Gender': Female

Will the customer purchase the product or not?