Explainable artificial intelligence:

It refers to the methods and techniques of artificial intelligence application in which the results of the solution can be understood by humans. It is opposite to the black box concept in which the machine learning model designers can't explain about why the machine gets stopped by that particular solution. The challenge of giving explanation about AI solutions can also be called as the interpretability problem. It also has another consideration-infobesity which means the full transparency need not to be required always. The goal is to achieve the cooperation between algorithms and humans which can also be said as trust between them. AI systems will sometimes learn the undesirable tricks that can do an optimal job of satisfying the explicit pre-programmed goals on the training data, but that does not reflect the complicated and implicit desires of the human system designers.

There are two different types of XAI.

The first type of XAI are explanations that help to understand the data better.  
 The second type of explanations are the ones that help to understand the model better