Given:

In this problem two languages A and B are present.

Proof:

Two languages A and B are Turing incomparable if the language is not Turing comparable with language B and it's vice versa.

Languages Incomparability can be proved as follows:

• In the Previous question there was one more language J was given for proving Turing reducibility of 2 languages A and B.

• If it comes to previous situation there was one more language J exists and it is being used to decide the Turing reducibility of two languages A and B.

• But if it comes to discuss about current situation then no other language or can say oracle support with Turing machine or language is given to detect Turing Comparability.

• Here no Turing machine is given that will work as an oracle Turing machine to find decidability and Turing reducibility.

• So none language from A and B can be replaced by any intermediate language and further no oracle Turing machine can be produced.

• For producing any Turing machine at least one intermediate language is required.

• So both languages can be compared through intermediate languages and Turing reducibility can be found.

• Oracle Turing machine set is countable that is why it is required to find the Turing reducibility and on the other hand set of all languages are uncountable.

• Most important thing is still missing that Turing reducibility cannot be established until decidability is proved as Turing reducibility is generalized concept of decidability.

• If discuss about further concept that how to find Turing comparability then machine must be added up with oracle support.

Conclusion:

No solution or method is defined here to prove the decidability of 2 languages so languages A and B are not Turing reducible.

Hence it is clear that language A and B is Turing incomparable.