<u>Difference Between Multiplexer and De-multiplexer:</u>

No	Multiplexer	De-multiplexer
1.	Multiplexer means many into one.	De-multiplexer means one to many.
2.	A multiplexer is a circuit that accepts many input but give only one output.	A De-multiplexer is a circuit that accepts only one input but gives many outputs.
3.	It is called data selector.	It is called data distributor.
4.	When designing multiplexer, don't need to use additional gates.	Additional gates are included when designing De-multiplexer.
5.	It is a parallel to series conversion process.	It is a series to parallel conversion process.
6.	It is generally an active low terminal that means it will perform the required operation when it is low.	If the De-multiplexer's input is always true, the De-multiplexer acts as a decoder.
7.	Telephone network maintained with the help of multiplexer. Because multiple audio signals can be isolated in one wire.	De-multiplexer like as Radio, Television that has one sender and many receiver.
8	Example: 4-to-1, 8-to-1, 16-to-1 Multiplexer	Example: 1-to-4, 1-to-8, 1-to-16 Demultiplexer.