



Jul 18, 2023

**Abdelali BARIR**

has successfully completed

**Tools for Data Science**

an online non-credit course authorized by IBM and offered through Coursera

Three handwritten signatures in black ink, stacked vertically, over a dotted line.

Maureen McElaney  
Romeo Kienzler  
Svetlana Levitan

**COURSE  
CERTIFICATE**



Verify at:

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Coursera has confirmed the identity of this individual and their participation in the course.