



This is to certify that

Ma'shum Abdul Jabbar

successfully completed and received a passing grade in

Data Science Hands-On with Open Source Tools

(DS0105EN, provided by CognitiveClass)

A course on **cognitiveclass**.ai Powered by **IBM Developer Skills Network**.

Issued by Cognitive Class

July 13, 2020

Authenticity of this certificate can be validated by going to: https://courses.cognitiveclass.ai/certificates/7ea3c5d5fe054d47ad24f1ec96c8fbed

Certificate ID Number: 7ea3c5d5fe054d47ad24f1ec96c8fbed July 13, 2020