This tutorial will walk you through the sign-up process for IBM quantum. To start navigate to <u>https://www.ibm.com/quantum</u> and click on "Sign in to Platform" in the upper right corner.



It'll open a new tab so make sure to disable any pop-up blockers that might stop the link from working. Next if you don't have one click on "Create an IBMid" and follow the on screen prompts, otherwise sign in to your existing account.

IBM Quantum Platform Dashboard Functions Comput	e resources Workloads		Q Search	
IBM Quantum Use our suite of applications to support your quantum research and development needs.		Sign in to IBM Quantum Continue with IBMid G () 10 10 12	æ	
Ga Platform Copy your API token, track jobs, and view quantum compute resources. < ● ● ● >	Network Network Network Network Network Image: Answer of the state of the sta	New to IBM Quantum? Create an IBMid Having trouble signing in? Try signing in with an IBMid. If you are stil issues, contact the IBMid help desk.		
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After signing in your Dashboard should look like the one below.

IBM Quantum Platform	Dashboard		Workloads					ដ្ឋា	III	
Justin Beltran										
IBM Quantum Platform					API Token		- () - ()			
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Click on copy to clipboard icon (circled in red) where the API token is located and paste into the jupyter notebook file where it says "your token here" just below the cell titled "On Quantum Computer."

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87 CD	 On a Quantum Computer 				
	Next we'll run those same circuit you build on an actual quantum computer				
	First you will need to go to <u>https://quantum.ibm.com/account</u> and make an account if you don't already have one. Then under profile settings, scroll down to API token and copy and paste it into the token='your token here'' section below.				
	<pre>[] service = QiskitRuntimeService(channel="ibm_quantum",</pre>				
	[] service.backends(min_num_qubits=6)				
<>	<pre></pre>				
=	Use one of the backends available above. Here's an example using IBM Sherbrooke. Feel free to leave it if it is available for you as well.				
2					
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Now any cell that runs the "backend_real" will automatically use the quantum computer backend specified in "service.backend()" but it will also debit time to run circuits against your API token and you only have 10 minutes total per month.