Name	Туре	Site	Year Released	Company	Language	Info	Extra Links	Pros	Cons
Qiskit	Programming-based	https://qiskit.org/	2017	IBM	Python	Most popular tool	https://github. com/Qiskit/qiskit	Allows users to execute their codes on actual devices	Installing is a hastle
QuTIP	Programming-based	http://qutip.org/	2012	J. R. Johansson, P. D. Nation, and F. Nori	Python	Very similar to Qiskit (syntax- wise)	https://github.com/qutip		Only simulation
Q#	Programming-based	https://docs.microsoft.com/en- us/quantum/overview/what-is- qsharp-and-qdk?view=qsharp- preview	2017	Microsoft	New open- source	Q# draws familiar elements from Python, C#, and F#	https://github. com/Microsoft/Quantum		Only simulation
Cirq	Programming-based	https://github. com/quantumlib/Cirq	2018	Google (but not an official product)	Python		https://cirq.readthedocs. io/en/stable/index.html		Only simulation
Ocean SDK	Programming-based	https://docs.ocean.dwavesys. com/en/latest/index.html	N/A	D:Wave	Python	Terminal-style	https://github. com/dwavesystems/dwa ve-ocean-sdk		Only simulation
Pyquil	Programming-based	https://github.com/rigetti/pyquil	2018	Rigetti	Python		https://github. com/rigetti/quilc		Only simulation
Q.js	Drag and Drop	https://stewdio.github.io/q. js/index.html	N/A (probably 2020)	Stewart Smith	JavaScript	Python-inspired No installation needed (browser)	https://github. com/stewdio/q.js	No installation needed	Requires quantum gates- level knowledge
Quirk	Drag and Drop	https://algassert.com/quirk	2016	Craig Gidney	JavaScript	Browser	https://github. com/Strilanc/Quirk	No installation needed	Requires quantum gates- level knowledge
QUI	Drag and Drop	https://qui.research.unimelb. edu.au/#tab13	2018	Hollenberg Group at the University of Melbourne.	?	Browser	https://qui.research. unimelb.edu.au/#tab5	No installation needed	Requires quantum gates- level knowledge
Scaffold/ScaffCC	Programming-based	https://github. com/epiqc/ScaffCC	2012		C/C++/Verilog		https://www.cs. princeton. edu/research/techreps/T R-934-12	Support behavioral-like synatx of quantum agtes	
Qrack	Programming-based	https://vm6502q.readthedocs. io/en/latest/	2017	Daniel Strano	C++			Has support of Qiskit	
QX Simulator	QASM-based	http://quantum-studio. net/#quick_start		QuTech by Nader Khammassi	QASM				low-level quantum assembly language
Q-kit	Drag and Drop (GUI)	https://sites.google. com/view/quantum-kit/home	2018		QASM-like command line instructions			Can use Python to genrate command line instructions	

Silq	Programming-based	https://silq.ethz. ch/documentation	2020	ETH Zürich	New open- source		Uses higher level implementation rather than gate level	
Quipper	Programming-based	https://www.mathstat.dal. ca/~selinger/quipper/	2013	Dalhousie University	New open- source	https://dl.acm. org/doi/10. 1145/2491956.2462177		