

- Use **logical operators** on Booleans to compute whether an expression is True or False
- Use **conditionals** when reading and writing algorithms that make choices based on data
- Recognize the different types of **errors** that can be raised when you run Python code
- Translate Boolean expressions to **truth tables** and **circuits**
- Translate **circuits** to **truth tables** and Boolean expressions
- Recognize how addition is done at the circuit level using **algorithms and abstraction**
- Use **while loops** when reading and writing algorithms to repeat actions while a certain condition is met
- Identify **start values**, **continuing conditions**, and **update actions** for **loop control variables**
- Use **for loops** when reading and writing algorithms to repeat actions a specified number of times
- Recognize which numbers will be produced by a **range** expression
- **Index** and **slice** into strings to break them up into parts
- Use for loops to loop over strings by **index**
- Translate algorithms from **control flow charts** to Python code
- Use **nesting** of statements to create complex control flow