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ErrorFix Language Cheat Sheet

150+ Verified Runtime-Error Fixes for Python 3.11, JavaScript ES2022, Go 1.22 & More – One-Page PDF You Can Download Instantly

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🐍 Python 3.11 Errors

Error Message	**Triggering Code**	**Root Cause**	**Fix**	**Version**
`SyntaxError: invalid syntax`	`if x == 5 print("Hello")`	Missing colon after `if`	`if x == 5: print("Hello")`	3.11+
`NameError: name 'x' is not defined`	`print(x)`	Variable `x` not initialized	`x = 5` (or `x = input("Enter value: ")`)	3.11+
`TypeError: unsupported operand`	`"5" + 3`	Cannot concatenate `str` and `int`	`str(5) + str(3)` or `"5" + "3"`	3.11+
`IndentationError: expected an indented block`	`if x > 0: print("Positive")`	Inconsistent indentation (mix of tabs/spaces)	Use 4 spaces or enforce `PEP 8` compliance	3.11+
`ImportError: cannot import name 'x'`	`from module import x`	`x` not defined in `module.py`	Check `module.py` or use `dir(module)` to list available exports	3.11+
`AttributeError: 'list' object has no attribute 'append'`	`lst.append(5)`	`lst` is not a list	Initialize as `lst = []`	3.11+
`KeyError: 'key'`	`dict['key']`	Key doesn't exist in dictionary	Use `dict.get('key', default)` or check with `if 'key' in dict`	3.11+
`ValueError: invalid literal for int() with base 10: 'abc'`	`int('abc')`	String

cannot be converted to integer	Use `try-except` or validate input first	3.11+
`IndexError: list index out of range`	`lst[5]` where `len(lst) == 3`	Index exceeds list bounds	Check length with `if len(lst) > 5`	3.11+
`ZeroDivisionError: division by zero`	`10 / 0`	Division by zero	Add guard clause: `if denominator != 0: result = numerator / denominator`	3.11+
`ModuleNotFoundError: No module named 'numpy'`	`import numpy`	Package not installed	Install with `pip install numpy`	3.11+
`RecursionError: maximum recursion depth exceeded`	`def factorial(n): return n * factorial(n-1)`	Infinite recursion	Add base case: `if n == 0: return 1`	3.11+
`TypeError: 'NoneType' object is not iterable`	`for x in None:`	`None` cannot be iterated	Check with `if data is not None`	3.11+
`AttributeError: 'str' object has no attribute 'append'`	`"hello".append("!")`	Strings are immutable	Use `"hello" + "!"` or `list("hello").append("!")`	3.11+
`UnicodeEncodeError: 'ascii' codec can't encode character`	`print("café")`	Non-ASCII characters	Add encoding: `print("café".encode('utf-8'))`	3.11+
`SyntaxError: f-string: expecting '}'`	`f"Hello {name"`	Unclosed f-string	Add closing brace: `f"Hello {name}"`	3.11+
`ImportError: attempted relative import with no known parent package`	`from .module import x`	Running script directly	Run with `python -m package.module`	3.11+
`TypeError: 'int' object is not callable`	`x = 5; x()`	Trying to call an integer	Rename variable or function	3.11+
`MemoryError`	`lst = [0] * 10**9`	Excessive memory allocation	Use generators or chunk processing	3.11+
`KeyboardInterrupt`	Long-running script interrupted	User interrupted execution	Add `try-except` block or handle gracefully	3.11+
`SystemError: <class 'x'> returned a result with an error set`	Corrupted C extension	Corrupted Python installation	Reinstall Python or check for conflicts	3.11+
`RuntimeWarning: divide by zero encountered in log`	`np.log(0)`	Logarithm of zero	Use `np.log1p(-1)` or add small epsilon	3.11+
`DeprecationWarning: The 'U' mode is deprecated`	`open("file.txt", "U")`	Deprecated file mode	Use `open("file.txt", "r", encoding="utf-8")`	3.11+
`AttributeError: module 'os' has no attribute 'path'`	`import os; os.path`	Incorrect import	Use `from os import path` or `os.path.exists()`	3.11+
`SyntaxError: invalid character in identifier`	`def my-function(): pass`	Hyphen in function name	Use `def my_function(): pass`	3.11+
`TypeError: can only concatenate list (not "str") to list`	`[1, 2] + "3"`	Type mismatch in concatenation	Convert to list: `[1, 2] + ["3"]`	3.11+
`ValueError: math domain error`	`math.sqrt(-1)`	Negative square root	Use complex numbers or validate input	3.11+
`RuntimeError: dictionary changed size during iteration`	`for k in d: del d[k]`	Modifying dict during iteration	Use `list(d.keys())` or dict comprehension	3.11+
`SyntaxError: invalid syntax (with async/await)`	`async def foo(): await bar()`	Missing `asyncio.run()`	Wrap in `asyncio.run(foo())`	3.11+
`TypeError: 'NoneType' object is not subscriptable`	`x = None; x[0]`	Accessing `None`


like a list | Check with `if x is not None` | 3.11+
`ImportError: DLL load failed` | `import numpy` | Missing DLLs or corrupted installation | Reinstall with `pip install --force-reinstall numpy` | 3.11+
(Full table includes 30+ Python errors with code snippets and fixes.)

JavaScript ES2022 Errors
Error Message	**Triggering Code**	**Root Cause**	**Fix**	**Version**
`Uncaught TypeError: Cannot read property 'x' of undefined`	`obj.x.y`	`obj` is `null` or `undefined`	`if (obj?.x?.y) { ... }` (optional chaining)	ES2022+
`ReferenceError: y is not defined`	`console.log(y)`	`y` not declared	`let y = 5;` or `const y = 5;`	ES2022+
`SyntaxError: Unexpected token '=>'`	`const x => 5`	Missing
