

Exceptions Question Bank

CSCI 40

How current LLMs scored on this practice bank		2026-08-26
Model	Reasoning	Score
claude-haiku-4.5	low effort	35/36 (97%)
claude-sonnet-5	low effort	34/36 (94%)
claude-fable-5	low effort	35/36 (97%)
claude-opus-4.8	low effort	36/36 (100%)
gpt-5.6-luna	low reasoning	33/36 (92%)
gpt-5.4	low reasoning	36/36 (100%)
gpt-5.6-terra	low reasoning	32/36 (89%)
gpt-5.5	low reasoning	35/36 (97%)
gpt-5.6-sol	low reasoning	36/36 (100%)
gemini-3.1-flash-lite	minimal thinking	26/36 (72%)
gemini-3.5-flash-lite	minimal thinking	32/36 (89%)
gemini-3.6-flash	minimal thinking	34/36 (94%)
gemini-3.7-flash	low thinking	36/36 (100%)
One independent, tool-free prompt per question; deterministic executable ground truth.		

Total Score: _____/4

Your quiz will contain 4 one-point questions that follow the patterns in this practice bank.

Recall that you are responsible for knowing the following exceptions: AssertionError, AttributeError, FileNotFoundError, IndexError, KeyError, NameError, UnboundLocalError, TypeError, ValueError, ZeroDivisionError.

Problem 1. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = []
total = 0
while xs:
    total += 1
print('total=', total)
```

Answer:

```
total= 0
```

Problem 2. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = []  
while xs:  
    total += 1  
    assert(xs)  
print('total=', total)
```

Answer:

NameError

Problem 3. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = []  
while len(xs) < 5:  
    xs.append('test')  
print('len(xs)=', len(xs))
```

Answer:

len(xs)= 5

Problem 4. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = []  
while len(xs) < 5:  
    xs.append('test')  
assert(xs)  
print('len(xs)=', len(xs))
```

Answer:

len(xs)= 5

Problem 5. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]  
while xs:  
    xs.append('test')  
print('len(xs)=', len(xs))
```

Answer:

runs forever

Problem 6. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]
total = 0
while xs:
    total /= total
print('len(xs)=', len(xs))
```

Answer:

ZeroDivisionError

Problem 7. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]
while xs:
    xs.append('test')
    assert('t' in xs)
print('len(xs)=', len(xs))
```

Answer:

AssertionError

Problem 8. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]
while xs:
    xs += 'test'
print('len(xs)=', len(xs))
```

Answer:

runs forever

Problem 9. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]
total = 10
for x in xs:
    total %= x
print("total=", total)
```

Answer:

```
total= 0
```

Problem 10. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [0, 1, 2]
xs.replace(1, 2)
print("xs=", xs)
```

Answer:

```
AttributeError
```

Problem 11. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
s = 'hello~world'
i = s.find('~')
print("i=", i)
```

Answer:

```
i= 5
```

Problem 12. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1': 99, 'hw2': 88},
    'bob': {'hw1': 82, 'hw2': 91},
}
for k,v in sorted(grades.items()):
    print(v['hw1'])
```

Answer:

99
82

Problem 13. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1': 99, 'hw2': 88},
    'bob': {'hw1': 82, 'hw2': 91},
}
for k,v in sorted(grades.items()):
    print(k['hw1'])
```

Answer:

TypeError

Problem 14. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1': 99, 'hw2': 88},
    'bob': {'hw1': 82, 'hw2': 91},
}
for k,v in sorted(grades.items()):
    print(v[0])
```

Answer:

KeyError

Problem 15. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1':99, 'hw2':88},
    'bob': {'hw1':82, 'hw2':91},
}
for k,v in sorted(grades.items()):
    print(k[0])
```

Answer:

a
b

Problem 16. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1':99, 'hw2':88},
    'bob': {'hw1':82, 'hw2':91},
}
output = "grade=" + grades['alice']['hw1']
print('output=', output)
```

Answer:

TypeError

Problem 17. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1':99, 'hw2':88},
    'bob': {'hw1':82, 'hw2':91},
}
output = "grade=" + grades['charlie']['hw1']
print('output=', output)
```

Answer:

KeyError

Problem 18. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice':{ 'hw1':99, 'hw2':88},
    'bob':{ 'hw1':82, 'hw2':91},
}
output = "grade=" + grades['bob']['hw2'][91]
print('output=', output)
```

Answer:

TypeError

Problem 19. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice':{ 'hw1':99, 'hw2':88},
    'bob':{ 'hw1':82, 'hw2':91},
}
output = alice['hw1']
print('output=', output)
```

Answer:

NameError

Problem 20. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice':{ 'hw1':99, 'hw2':88},
    'bob':{ 'hw1':82, 'hw2':91},
}
total = 0
for i in grades:
    for j in i:
        total += 1
print('total=', total)
```

Answer:

total= 8

Problem 21. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]
try:
    result = xs[3]
except IndexError:
    result = -1
print('result=', result)
```

Answer:

result= -1

Problem 22. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]
try:
    result = xs[3]
except:
    result = -1
print('result=', result)
```

Answer:

result= -1

Problem 23. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
xs = [1, 2, 3]
try:
    result = xs[3]
except NameError:
    result = -1
print('result=', result)
```

Answer:

IndexError

Problem 24. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1':99, 'hw2':88},
    'bob': {'hw1':82, 'hw2':91},
}
try:
    output = "grade=" + grades['charlie']['hw1']
except KeyError:
    output = 'oops'
print('output=', output)
```

Answer:

output= oops

Problem 25. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
grades={
    'alice': {'hw1':99, 'hw2':88},
    'bob': {'hw1':82, 'hw2':91},
}
try:
    output = "grade=" + grades['charlie']['hw1']
except IndexError:
    output = 'oops'
print('output=', output)
```

Answer:

KeyError

Problem 26. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def foo(xs):
    assert(len(xs) > 0)
foo()
```

Answer:

TypeError

Problem 27. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def foo(xs):  
    assert(len(xs) > 0)  
  
try:  
    foo([1,2,3])  
except AssertionError:  
    pass
```

Answer:

(no output)

Problem 28. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def foo(xs):  
    assert(len(xs) > 0)  
  
result = 0  
try:  
    result += foo([1,2,3])  
except AssertionError:  
    result -= 1  
print('result=', result)
```

Answer:

TypeError

Problem 29. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def foo(xs):  
    assert(len(xs) > 0)  
  
example = 0  
try:  
    example += foo([1,2,3])  
    example += 1  
except ValueError:  
    pass  
print('example=', example)
```

Answer:

TypeError

Problem 30. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def foo(xs):  
    assert(len(xs) > 0)  
  
example = 0  
try:  
    example += foo([1,2,3])  
    example += 1  
except AssertionError:  
    pass  
print('example=', example)
```

Answer:

TypeError

Problem 31. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def bar(xs):  
    assert(len(xs) > 0)  
    return len(xs)*2  
  
result = 0  
try:  
    result += bar([1,2,3])  
    result += bar([2,3])  
    result += bar([])  
    result += bar([5])  
except AssertionError:  
    pass  
  
print('result=', result)
```

Answer:

```
result= 10
```

Problem 32. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def bar(xs):
    assert(len(xs) > 0)
    return len(xs)*2

result = 0
try:
    result += bar([1,2,3])
    result += bar([2,3])
    result += bar([])
    result += bar([5])
except ValueError:
    pass

print('result=', result)
```

Answer:

AssertionError

Problem 33. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def bar(xs):
    assert(len(xs) > 0)
    return len(xs)*2

result = 0
try:
    result += bar([1,2,3])
    result += bar([2,3])
    result += bar()
    result += bar([5])
except AssertionError:
    result += 1
except TypeError:
    result += 5

print('result=', result)
```

Answer:

result= 15

Problem 34. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def bar(xs):  
    if not len(xs) > 0:  
        raise ValueError('input - list - must - be - non-empty')  
    return len(xs)*2  
  
result = 0  
try:  
    result += bar([1,2,3])  
    result += bar([2,3])  
    result += bar()  
    result += bar([5])  
except AssertionError:  
    result += 1  
except TypeError:  
    result += 5  
  
print('result=', result)
```

Answer:

```
result= 15
```

Problem 35. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def bar(xs):
    if not len(xs) > 0:
        raise ValueError('input list must be non-empty')
    return len(xs)*2

result = 0
try:
    result += bar([1,2,3])
    result += bar([2,3])
    result += bar()
    result += bar([5])
except ValueError:
    result += 1
except TypeError:
    result += 5

print('result=', result)
```

Answer:

```
result= 15
```

Problem 36. The following code (circle one)

terminates without error

throws an exception

runs forever

If the code terminates without error, write the output. If the code throws an exception, state the exception.

```
def bar(xs):  
    if not len(xs) > 0:  
        raise ValueError('input list must be non-empty')  
    return len(xs)*2  
  
result = 0  
result += bar  
  
print('result=', result)
```

Answer:

TypeError