Exceptions Question Bank

CSCI040: Computing for the Web Introduction to Hacking

Your exceptions quiz will contain 5 questions that follow the pattern in this question bank.

 $Recall\ that\ you\ are\ responsible\ for\ knowing\ the\ following\ exceptions:\ Assertion Error,\ Attribute Error,\ Index Error,\ Key Error,\ Name Error,\ Unbound Local Error,\ Type Error,\ Zero Division Error.$

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)
```

Problem 2. The following code (circle one)

terminates without error

throws an exception

runs forever

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

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.

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.

Problem 5. The following code (circle one)

terminates without error

throws an exception

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))
```

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))
```

Problem 8. The following code (circle one)

terminates without error

throws an exception

runs forever

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

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)
```

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)
```

Problem 11. The following code (circle one)

terminates without error

throws an exception

runs forever

```
s = 'hello_world'
i = s.find('_')
print("i=", i)
```

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'])
```

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'])
```

Problem 14. The following code (circle one)

terminates without error

throws an exception

runs forever

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

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])
```

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)
```

Problem 17. The following code (circle one)

terminates without error

throws an exception

runs forever

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

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)
```

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)
```

Problem 20. The following code (circle one)

terminates without error

throws an exception

runs forever

```
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)
```

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)
```

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)
```

Problem 23. The following code (circle one)

terminates without error

throws an exception

runs forever

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

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)
```

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)
```

Problem 26. The following code (circle one)

terminates without error

throws an exception

runs forever

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

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
```

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)
```

Problem 29. The following code (circle one)

terminates without error

throws an exception

runs forever

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

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

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)
```

Problem 31. The following code (circle one)

terminates without error

throws an exception

runs forever

```
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([5])
    result += bar([5])
except AssertionError:
    pass
```

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)
```

Problem 33. The following code (circle one)

terminates without error

throws an exception

runs forever

```
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([5])
except AssertionError:
    result += 1
except TypeError:
    result += 5
print('result=', result)
```