What will be the output of the following code: print(type([]))?

      a) <class 'tuple'>

      b) <class 'list'>

      c) <class 'dictionary'>

      d) <class 'set'>

Answer: b) <class 'list'>

What is the output of bool(0) in Python?

      a) True

      b) False

      c) 0

      d) None

Answer: b) False

What is the purpose of the self parameter in Python class methods?

      a) To define a class

      b) To refer to the current instance of the class

      c) To create a new object

      d) To delete an object

Answer: b) To refer to the current instance of the class

What will be the output of the following code:

```
def func(a, b=5, c=10):
    return a + b + c
print(func(3, 2))
```

      a) 20

b) 15

c) 10

d) 13

Answer: d) 13

Which of the following is the correct syntax for defining a dictionary in Python?

a) dict = {"name": "John", "age": 25}

b) dict = ["name": "John", "age": 25]

c) dict = ("name": "John", "age": 25)

d) dict = {"name", "John", "age", 25}

Answer: a) dict = {"name": "John", "age": 25}

What is the output of the following code:

```
a = [1, 2, 3]
b = a
b.append(4)
print(a)
```

a) [1, 2, 3]

b) [1, 2, 3, 4]

c) [4, 2, 3]

d) [1, 2, 3, 4, 4]

Answer: b) [1, 2, 3, 4]

Which of the following is used to create an anonymous function in Python?

a) def

b) lambda

c) anonymous

d) func

Answer: b) lambda

What is the result of the following code:

```
x = [1, 2, 3]
print(x * 2)
```

        a) [1, 2, 3, 1, 2, 3]

        b) [2, 4, 6]

        c) [1, 2, 3, 2]

        d) [1, 1, 2, 2, 3, 3]

Answer: a) [1, 2, 3, 1, 2, 3]

What does the __init__ method do in Python classes?

        a) It initializes the class.

        b) It is used to destroy an instance of the class.

        c) It is used to initialize attributes of the class.

        d) It is a method that executes before any other method.

Answer: c) It is used to initialize attributes of the class.

What will be the output of the following code:

```
class A:
    def __init__(self):
        self.counter = 1

    def increase(self):
        self.counter += 1

a = A()
a.increase()
print(a.counter)
```

a) 0

b) 1

c) 2

d) 3

Answer: c) 2

What is the purpose of the with statement in Python?

      a) To create a function

      b) To open a file and ensure it gets closed properly

      c) To handle exceptions

      d) To define a class

Answer: b) To open a file and ensure it gets closed properly

How do you create a generator in Python?

      a) By using the yield keyword

      b) By using the return keyword

      c) By using the generator keyword

      d) By using the next keyword

Answer: a) By using the yield keyword

What will be the output of the following code:
```
def func(x):
   if x % 2 == 0:
      return True
   else:
      return False

result = filter(func, [1, 2, 3, 4])
print(list(result))
```

a) [1, 3]

b) [2, 4]

c) [1, 2, 3, 4]

d) [1, 2, 3]

Answer: b) [2, 4]

What will be the output of the following code?

```
x = 5
y = "Hello, World!"
print(x + y)
```

a) 5Hello, World!
b) Hello, World!5
c) TypeError
d) 5 Hello, World!

Answer: c) TypeErro

What is the output of the following code?

```
print(type(5))
```

a) <class 'int'>
b) <class 'float'>
c) <class 'string'>
d) <class 'number'>

Answer: a) <class 'int'>

What is the output of the following code snippet?
```
def func(x):
    if x % 2 == 0:
        return True
    else:
        return False
```

```
result = filter(func, [1, 2, 3, 4])
print(list(result))
```

a) [1, 3]
b) [2, 4]
c) [1, 2, 3, 4]
d) [1, 2, 3]
Answer: b) [2, 4]

What will be the output of the following code?

```
x = [1, 2, 3]
y = [4, 5, 6]
print(x + y)
```

a) [1, 2, 3, 4, 5, 6]
b) [5, 7, 9]
c) TypeError
d) None of the above

Answer: a) [1, 2, 3, 4, 5, 6]
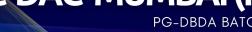
What does the following list comprehension produce?

```
[x**2 for x in range(5)]
```

a) [1, 4, 9, 16]
b) [0, 1, 4, 9, 16]
c) [0, 1, 2, 3, 4]
d) [1, 2, 3, 4, 5]

Answer: b) [0, 1, 4, 9, 16]

What is the output of the following code snippet involving a lambda function?

```
a = [(lambda x: x**2)(x) for x in range(5)]
print(a)
```

a) [1, 4, 9, 16]
b) [0, 1, 4, 9, 16]
c) [0, 1, 2, 3, 4]
d) [1, 2, 3, 4, 5]
Answer: b) [0, 1, 4, 9, 16]
Given the following code, what will be the output?

```
def foo(x, y=[]):
    y.append(x)
    return y

print(foo(1))
print(foo(2))
```

a) [1] [2]
b) [1] [1, 2]
c) [1, 2] [1, 2, 2]
d) [1, 2] [1, 2]
Answer: b) [1] [1, 2]
What is the result of the following code?

```
class A:
    def __init__(self):
        self._value = 1

    @property
    def value(self):
        return self._value

    @value.setter
    def value(self, val):
        self._value = val

a = A()
a.value = 10
print(a.value)
```

a) 1
b) 10
c) AttributeError
d) None

Answer: b) 10
What will the following code output?

```python
class Parent:
    def __init__(self):
        self.value = 1

class Child(Parent):
    def __init__(self):
        super().__init__()
        self.value = 2

child = Child()
print(child.value)
```
a) 1
b) 2
c) AttributeError
d) None
Answer: b) 2
What will be the output of the following code involving exception handling?

```python
try:
    result = 10 / 0
except ZeroDivisionError:
    result = 'Infinity'
finally:
    result = 'Done'
print(result)
```
a) Infinity
b) ZeroDivisionError
c) Done
d) None of the above
Answer: c) Done

What will be the output of the following code?

```python
x = 5
y = "5"
print(x + int(y))
```

a) 55
b) 10

c) TypeError
d) 5
Answer: b) 10
Which of the following is used to define a block of code in Python?

a) Curly braces {}
b) Parentheses ()
c) Indentation
d) Square brackets []
Answer: c) Indentation
What is the correct way to create a function in Python?

a) function myFunction():
b) def myFunction():
c) create myFunction():
d) def myFunction:
Answer: b) def myFunction():
What will be the output of the following code?

```
a = "Hello"
b = "World"
print(a + " " + b)
```

a) HelloWorld
b) Hello World
c) HelloWorld
d) "Hello World"
Answer: b) Hello World

Which of the following is the correct way to import a module in Python?

a) import module
b) include module
c) using module
d) require module
Answer: a) import module
What will be the output of the following code?

```
x = 10
y = 2
print(x // y)
```

a) 5
b) 5.0
c) 10
d) 10.0
Answer: a) 5

Which of the following is a mutable data type in Python?

a) tuple
b) list
c) string
d) int
Answer: b) list

How do you start a for loop in Python?

a) for i in range(10):
b) for (i = 0; i < 10; i++)
c) for i = 1 to 10:
d) foreach i in range(10):
Answer: a) for i in range(10):

What will be the output of the following code?
x = "Python"
print(x[0])

a) P
b) y
c) n
d) Error
Answer: a) P

Which of the following keywords is used for error handling in Python?

a) try
b) catch
c) throw
d) except
Answer: a) try

What will be the output of the following code?

x = [1, 2, 3]

```
x.append([4, 5])
print(x)
```

a) [1, 2, 3, 4, 5]
b) [1, 2, 3, [4, 5]]
c) [1, 2, 3, [4], [5]]
d) Error
Answer: b) [1, 2, 3, [4, 5]]

What will be the output of the following code?

```
x = {'a': 1, 'b': 2}
x['c'] = 3
print(x)
```

a) {'a': 1, 'b': 2, 'c': 3}
b) {'a': 1, 'b': 2}
c) {'c': 3}
d) {'a': 1, 'b': 2, 'c': 3, 'd': 4}
Answer: a) {'a': 1, 'b': 2, 'c': 3}

What is the output of the following code?

```
def foo(x, y=5):
    return x + y

print(foo(3))
```

a) 8
b) 15
c) 3
d) TypeError

Answer: a) 8

What will be the output of the following code?

```
x = [1, 2, 3]
x.extend([4, 5])
print(x)
```

a) [1, 2, 3, 4, 5]

b) [1, 2, 3, [4, 5]]
c) [1, 2, 3, [4], [5]]
d) Error

Answer: a) [1, 2, 3, 4, 5]

Which of the following statements is true about sets in Python?
a) Sets are mutable and allow duplicate elements.
b) Sets are immutable and allow duplicate elements.
c) Sets are mutable and do not allow duplicate elements.
d) Sets are immutable and do not allow duplicate elements.

Answer: c) Sets are mutable and do not allow duplicate elements.

What is the output of the following code?

```
x = [1, 2, 3, 4, 5]
print(x[1:4])
```
a) [1, 2, 3]
b) [2, 3, 4]
c) [1, 2, 3, 4]
d) [2, 3, 4, 5]

Answer: b) [2, 3, 4]

What will be the output of the following code?
```
x = 10
y = 20
x, y = y, x
print(x, y)
```

a) 10 20
b) 20 10
c) 20 20
d) 10 10

Answer: b) 20 10

What is the output of the following code snippet?

```
def make_account(balance):
    def account(action, amount=0):
        nonlocal balance
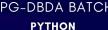```

```
    if action == "withdraw":
        balance -= amount
    elif action == "deposit":
        balance += amount
    return balance
return account


a = make_account(100)
print(a("withdraw", 10))
print(a("deposit", 20))
```

a) 90, 110
b) 90, 100
c) 90, 120
d) 100, 110
Answer: a

What is the output of the following code snippet?
```
class MyClass:
    def __init__(self):
        self.value = 0

    def increment(self):
        self.value += 1


a = MyClass()
b = a
b.increment()
print(a.value)
```

a) 0
b) 1
c) TypeError
d) AttributeError
Answer: b) 1

What is the output of the following code snippet?

```
def func(a, b=[]):
    b.append(a)
    return b
```

x = func(1)
y = func(2)
print(x, y)
a) [1] [2]
b) [1] [1, 2]
c) [1, 2] [2]
d) [1, 2] [1, 2]
Answer: d) [1, 2] [1, 2]
What is the output of the following code snippet?

```
def func(x, y):
    x += y
    return x


a = (1, 2)
b = (3, 4)
print(func(a, b))
```

a) (1, 2, 3, 4)
b) (4, 6)
c) (1, 2)
d) (1, 2, (3, 4))
Answer: a) (1, 2, 3, 4)

What will be the output of the following code snippet?
```
class A:
    def __init__(self, x):
        self.x = x


class B(A):
    def __init__(self, x, y):
        super().__init__(x)
        self.y = y


obj = B(1, 2)
print(obj.x, obj.y)
```

a) 1 2
b) 2 1
c) AttributeError
d) TypeError

Answer: a) 1 2

What is the output of the following code snippet?

```python
def func():
    try:
        return 1
    finally:
        return 2

print(func())
```
python

a) 1
b) 2
c) None
d) Error
Answer: b) 2

What is the output of the following code snippet?

```python
x = [1, 2, 3]
y = [4, 5]
z = x + y
y.extend(x)
print(z)
print(y)
```
python

a) [1, 2, 3, 4, 5], [4, 5, 1, 2, 3]
b) [4, 5, 1, 2, 3], [1, 2, 3, 4, 5]
c) [1, 2, 3, 4, 5], [1, 2, 3, 4, 5]
d) [4, 5], [1, 2, 3, 4, 5]
Answer: a) [1, 2, 3, 4, 5], [4, 5, 1, 2, 3]

What will be the output of the following code?

```python
def add(a, b):
    return a + b

def subtract(a, b):
    return a - b

ops = {'+': add, '-': subtract}
```

```
op = '+'
a = 10
b = 5
print(ops[op](a, b))
```

a) 5
b) 15
c) Error
d) None
Answer: b) 15

What is the output of the following code snippet?
```
def f1():
    return 1, 2, 3

a, b, c = f1()
print(a, b, c)
```

a) (1, 2, 3)
b) 1, 2, 3
c) [1, 2, 3]
d) 1 2 3
Answer: d) 1 2 3

What is the output of the following code snippet?
```
def func(a, b):
    return a * b

print(func('Hello', 3))
```

a) Hello
b) HelloHelloHello
c) TypeError
d) None
Answer: b) HelloHelloHello

What is the output of the following code snippet?
```
def outer(x):
    def inner(y):
        return x + y
    return inner
```

```
add_five = outer(5)
print(add_five(10))
```

a) 10
b) 15
c) 5
d) 50
Answer: b) 15

What is the output of the following code snippet?
```
def func(a, b=2, c=3):
    return a + b + c

print(func(1, c=4))
```

a) 6
b) 7
c) 9
d) TypeError
Answer: b) 7

What is the output of the following code snippet?
```
def func(x, lst=[]):
    lst.append(x)
    return lst

print(func(1))
print(func(2))
print(func(3, []))
```

a) [1], [1, 2], [3]
b) [1], [2], [3]
c) [1], [2], [1, 2, 3]
d) [1], [1, 2], [3, 2]
Answer: a) [1], [1, 2], [3]

What is the output of the following code snippet?

```
def f(x, L=[]):
    L.append(x)
    return L
```

```
print(f(1))
print(f(2))
print(f(3, [0]))
print(f(4))
```

a) [1], [2], [0, 3], [4]
b) [1], [1, 2], [0, 3], [1, 2, 4]
c) [1], [1, 2], [0, 3], [4]
d) [1], [2], [0, 3], [4]
Answer: c) [1], [1, 2], [0, 3], [4]

What is the output of the following code snippet?
```
def func(a, b):
    return a + b

print(func(*[1, 2]))
```

a) 1
b) 2
c) 3
d) TypeError
Answer: c) 3

What is the output of the following code snippet?
```
class A:
    def __init__(self):
        self._value = 1

    @property
    def value(self):
        return self._value

a = A()
print(a.value)
a.value = 10
print(a.value)
```

a) 1 10
b) 10 10
c) 1 Error
d) Error Error

Answer: c) 1 Error

What is the output of the following code snippet?

```python
class A:
    def __init__(self, x):
        self.x = x

    def __call__(self, y):
        return self.x + y

a = A(10)
print(a(20))
```

a) 10
b) 20
c) 30
d) Error
Answer: c) 30

What will be the output of the following code?

```python
class A:
    def __init__(self):
        self.__private = 1
    def get_private(self):
        return self.__private

a = A()
print(a.get_private())
```

a) 1
b) AttributeError
c) None
d) SyntaxError
Answer: a) 1

What will be the output of the following code?

```python
class A:
    def __init__(self):
        self.__private = 1
```

```
a = A()
print(a.__private)
```

a) 1
b) AttributeError
c) None
d) SyntaxError
Answer: b) AttributeError

What will be the output of the following code?
```
class A:
    def __init__(self, x):
        self.x = x

class B(A):
    def __init__(self, x, y):
        super().__init__(x)
        self.y = y

b = B(10, 20)
print(b.x, b.y)
```

a) 10, 20
b) 20, 10
c) AttributeError
d) None
Answer: a) 10, 20

What will be the output of the following code?
```
class A:
    def method(self):
        print("A")

class B(A):
    def method(self):
        print("B")

b = B()
b.method()
```

a) A
b) B

c) AttributeError
d) None
Answer: b) B

What will be the output of the following code?
```
def outer():
    x = 10
    def inner():
        nonlocal x
        x += 1
        return x
    return inner

f = outer()
print(f())
```

a) 11
b) 10
c) SyntaxError
d) None
Answer: a) 11

What will be the output of the following code?
```
def outer():
    x = 10
    def inner():
        x = 20
        return x
    return inner

f = outer()
print(f())
```

a) 10
b) 20
c) SyntaxError
d) None
Answer: b) 20

What will be the output of the following code?
```
def f(a, L=[]):
    L.append(a)
```

```
    return L
```

```python
print(f(1))
print(f(2))
print(f(3))
```

a) [1], [2], [3]
b) [1], [1, 2], [1, 2, 3]
c) [1], [1], [1]
d) None of the above
Answer: b) [1], [1, 2], [1, 2, 3]

What will be the output of the following code?
```python
def f(a, L=None):
    if L is None:
        L = []
    L.append(a)
    return L
```

```python
print(f(1))
print(f(2))
print(f(3))
python
```

a) [1], [2], [3]
b) [1], [1, 2], [1, 2, 3]
c) [1], [1], [1]
d) None of the above
Answer: a) [1], [2], [3]
What will be the output of the following code?

```python
def generator():
    yield 1
    yield 2
    yield 3
```

```python
g = generator()
print(next(g))
print(next(g))
print(next(g))
```

a) 1 2 3

b) 1 1 1
c) SyntaxError
d) None of the above
Answer: a) 1 2 3

What will be the output of the following code?

```
def generator():
    yield 1
    yield 2
    yield 3

g = generator()
for value in g:
    print(value)
```

a) 1 2 3
b) 1 1 1
c) SyntaxError
d) None of the above
Answer: a) 1 2 3
What will be the output of the following code?

```
def make_multiplier_of(n):
    def multiplier(x):
        return x * n
    return multiplier

times3 = make_multiplier_of(3)
print(times3(9))
```

a) 27
b) 9
c) 3
d) None of the above
Answer: a) 27
What will be the output of the following code?

```
def make_multiplier_of(n):
    def multiplier(x):
        return x * n
    return multiplier
```

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```
times3 = make_multiplier_of(3)
times5 = make_multiplier_of(5)
print(times3(9))
print(times5(3))
```

a) 27 15
b) 9 5
c) 3 5
d) None of the above
Answer: a) 27 15

What will be the output of the following code?

```
class A:
    def __init__(self):
        self._value = 1

    @property
    def value(self):
        return self._value

    @value.setter
    def value(self, val):
        self._value = val

a = A()
a.value = 10
print(a.value)
```

a) 1
b) 10
c) AttributeError
d) None
Answer: b) 10

What will be the output of the following code?

```
class A:
    def __init__(self):
        self._value = 1
```

```
    @property
    def value(self):
        return self._value

a = A()
a.value = 10
print(a.value)
```

a) 1
b) 10
c) AttributeError
d) None
Answer: c) AttributeError

What will be the output of the following code?

```
class Parent:
    def __init__(self):
        self.value = 1

class Child(Parent):
    def __init__(self):
        super().__init__()
        self.value = 2

child = Child()
print(child.value)
```

a) 1
b) 2
c) AttributeError
d) None
Answer: b) 2

What will be the output of the following code?
```
class Parent:
    def __init__(self):
        self.value = 1

class Child(Parent):
```

```
    def __init__(self):
        self.value = 2


child = Child()
print(child.value)
```

a) 1
b) 2
c) AttributeError
d) None
Answer: b) 2

What will be the output of the following code?
```
def foo(x):
    yield from range(x, 0, -1)


for i in foo(5):
    print(i)
```

a) 5 4 3 2 1
b) 4 3 2 1 0
c) 5 4 3 2 1 0
d) 4 3 2 1
Answer: a) 5 4 3 2 1

What will be the output of the following code?
```
def foo(x):
    yield from range(x)


for i in foo(5):
    print(i)
python
```

a) 0 1 2 3 4
b) 1 2 3 4 5
c) 5 4 3 2 1
d) 4 3 2 1 0
Answer: a) 0 1 2 3 4

What will be the output of the following code?
```
class A:
```

```
    def __init__(self, value):
        self.value = value

    def __add__(self, other):
        return A(self.value + other.value)

a = A(1)
b = A(2)
c = a + b
print(c.value)
```

a) 1
b) 2
c) 3
d) TypeError
Answer: c) 3

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __add__(self, other):
        return A(self.value + other.value)

a = A(1)
b = A(2)
c = a + b
d = c + a
print(d.value)
```

a) 1
b) 2
c) 3
d) 4
Answer: d) 4

What will be the output of the following code?


```
class A:
```

```
    def __init__(self, value):
        self.value = value

    def __add__(self, other):
        return A(self.value + other.value)

a = A(1)
b = A(2)
c = a + b
d = c + c
print(d.value)
```
a) 1
b) 2
c) 3
d) 6
Answer: d) 6

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __mul__(self, other):
        return A(self.value * other.value)

a = A(2)
b = A(3)
c = a * b
print(c.value)
```

a) 6
b) 5
c) 2
d) 3
Answer: a) 6

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value
```

```
    def __sub__(self, other):
        return A(self.value - other.value)


a = A(5)
b = A(3)
c = a - b
print(c.value)
```

a) 2
b) 3
c) 5
d) -2
Answer: a) 2

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __truediv__(self, other):
        return A(self.value / other.value)


a = A(6)
b = A(3)
c = a / b
print(c.value)
```

a) 2.0
b) 2
c) 3
d) 1
Answer: a) 2.0

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __floordiv__(self, other):
```

```
        return A(self.value // other.value)

a = A(7)
b = A(3)
c = a // b
print(c.value)
```

a) 2
b) 2.0
c) 3
d) 1
Answer: a) 2

What will be the output of the following code?

```
def func(x):
    return x % 2 == 0

result = filter(func, [1, 2, 3, 4, 5, 6])
print(list(result))
```

a) [2, 4, 6]
b) [1, 3, 5]
c) [2, 4]
d) [1, 2, 3, 4, 5, 6]
Answer: a) [2, 4, 6]

What will be the output of the following code?

```
def func(x):
    return x % 2 == 0

result = map(func, [1, 2, 3, 4, 5, 6])
print(list(result))
```

a) [False, True, False, True, False, True]
b) [1, 2, 3, 4, 5, 6]
c) [2, 4, 6]
d) [1, 3, 5]
Answer: a) [False, True, False, True, False, True]

What will be the output of the following code?

```
def func(x, y):
    return x + y

from functools import reduce
result = reduce(func, [1, 2, 3, 4, 5])
print(result)
```

a) 15
b) 10
c) 5
d) 0
Answer: a) 15

What will be the output of the following code?

```
def func(x, y):
    return x + y

from functools import reduce
result = reduce(func, [1, 2, 3, 4, 5], 10)
print(result)
```

a) 25
b) 20
c) 15
d) 10
Answer: a) 25

What will be the output of the following code?

```
def func(x):
    return x % 2 == 0

result = [i for i in [1, 2, 3, 4, 5, 6] if func(i)]
print(result)
```

a) [2, 4, 6]
b) [1, 3, 5]
c) [2, 4]
d) [1, 2, 3, 4, 5, 6]

Answer: a) [2, 4, 6]

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __repr__(self):
        return f"A({self.value})"

a = A(1)
b = A(2)
print(a, b)
```

a) A(1) A(2)
b) 1 2
c) Error
d) None of the above
Answer: a) A(1) A(2)

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __str__(self):
        return f"A({self.value})"

a = A(1)
b = A(2)
print(a, b)
```

a) A(1) A(2)
b) 1 2
c) Error
d) None of the above
Answer: a) A(1) A(2)

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __repr__(self):
        return f"A({self.value})"

    def __str__(self):
        return f"A({self.value})"

a = A(1)
b = A(2)
print(a, b)
```

a) A(1) A(2)
b) 1 2
c) Error
d) None of the above
Answer: a) A(1) A(2)

What will be the output of the following code?

```
class A:
    def __init__(self, value):
        self.value = value

    def __eq__(self, other):
        return self.value == other.value

a = A(1)
b = A(1)
print(a == b)
```

a) True
b) False
c) Error
d) None of the above
Answer: a) True

What will be the output of the following code?

```
for i in range(5):
```

```
print(i)
```

    a) 1 2 3 4 5
    b) 0 1 2 3 4
    c) 1 2 3 4
    d) 0 1 2 3 4 5
    Answer: b) 0 1 2 3 4

What does the following code do?

```
for i in range(3):
    print("Hello")
```

    a) Prints "Hello" once
    b) Prints "Hello" twice
    c) Prints "Hello" thrice
    d) Prints "Hello" four times
    Answer: c) Prints "Hello" thrice

What will be the output of the following code?

```
for i in range(1, 10, 2):
    print(i, end=' ')
```

    a) 1 3 5 7 9
    b) 1 2 3 4 5 6 7 8 9
    c) 1 3 5 7
    d) 2 4 6 8 10
    Answer: a) 1 3 5 7 9

What will be the output of the following code?

```
for i in range(5):
    for j in range(i):
        print(j, end=' ')
    print()
```

    a) 0
    0 1
    0 1 2
    0 1 2 3
    b) 1

1 2
1 2 3
1 2 3 4
c) 0
0 1
0 1 2
0 1 2 3
d)
0
0 1
0 1 2
0 1 2 3
Answer: d) 0
0 1
0 1 2
0 1 2 3

What will be the output of the following code?
```
for i in "Python":
    print(i, end=' ')
```

        a) P y t h o n
        b) P y t h o n
        c) Python
        d) Error
        Answer: a) P y t h o n

What will be the output of the following code?
```
for i in range(2, 6):
    print(i ** 2, end=' ')
```

        a) 4 9 16 25
        b) 4 9 16
        c) 2 3 4 5
        d) 4 16 36 64
        Answer: a) 4 9 16 25

What will be the output of the following code?
```
sum = 0
for i in range(1, 10):
    sum += i
print(sum)
```

a) 45
b) 50
c) 55
d) 60
Answer: a) 45

What will be the output of the following code?

```python
for i in range(5):
    if i == 3:
        break
    print(i, end=' ')
```

a) 0 1 2 3
b) 0 1 2
c) 1 2 3
d) 0 1 2 3 4
Answer: b) 0 1 2

What will be the output of the following code?

```python
for i in range(5):
    if i % 2 == 0:
        continue
    print(i, end=' ')
```

a) 0 1 2 3 4
b) 1 3
c) 0 2 4
d) 1 2 3
Answer: b) 1 3

What will be the output of the following code?

```python
for i in range(3, 10, 2):
    print(i, end=' ')
```

a) 3 4 5 6 7 8 9
b) 3 5 7 9
c) 3 6 9
d) 4 6 8 10
Answer: b) 3 5 7 9

What will be the output of the following code?

```
i = 0
while i < 5:
    print(i)
    i += 1
```

         a) 1 2 3 4 5
         b) 0 1 2 3 4 5
         c) 0 1 2 3 4
         d) 1 2 3 4
         Answer: c) 0 1 2 3 4

What will be the output of the following code?

```
i = 1
while i < 10:
    if i % 3 == 0:
        break
    print(i, end=' ')
    i += 1
```

         a) 1 2 3
         b) 1 2
         c) 1 2 3 4 5 6 7 8 9
         d) 1 2 4
         Answer: b) 1 2

What will be the output of the following code?

```
i = 0
while i < 5:
    i += 1
    if i == 3:
        continue
    print(i, end=' ')
```

         a) 1 2 3 4 5
         b) 0 1 2 4 5
         c) 1 2 4 5
         d) 0 1 2 3 5
         Answer: c) 1 2 4 5

What will be the output of the following code?

```
i = 10
```

```
while i > 0:
    print(i, end=' ')
    i -= 2
```

      a) 10 8 6 4 2 0
      b) 10 8 6 4 2
      c) 9 7 5 3 1
      d) 8 6 4 2 0
      Answer: b) 10 8 6 4 2

What will be the output of the following code?

```
count = 0
while count < 3:
    print("Hello")
    count += 1
```

      a) Prints "Hello" twice
      b) Prints "Hello" three times
      c) Prints "Hello" once
      d) Prints "Hello" four times
      Answer: b) Prints "Hello" three times

What will be the output of the following code?

```
i = 0
while i < 4:
    print(i, end=' ')
    i += 2
```

      a) 0 2 4
      b) 0 2
      c) 2 4
      d) 0 1 2 3
      Answer: b) 0 2

What will be the output of the following code?
```
i = 5
while i:
    print(i, end=' ')
    i -= 1
```

a) 5 4 3 2 1 0
b) 4 3 2 1 0
c) 5 4 3 2 1
d) 5 4 3 2 1 0 -1
Answer: c) 5 4 3 2 1

What will be the output of the following code?

```
num = 0
while num < 6:
    num += 1
    if num == 3:
        continue
    print(num, end=' ')
```

        a) 1 2 3 4 5 6
        b) 1 2 4 5 6
        c) 0 1 2 4 5
        d) 1 2 4 5
        Answer: b) 1 2 4 5 6

What will be the output of the following code?

```
x = 0
while (x < 7):
    if (x == 5):
        break
    print(x, end=' ')
    x += 1
```

        a) 0 1 2 3 4 5
        b) 0 1 2 3 4
        c) 1 2 3 4 5 6
        d) 1 2 3 4
        Answer: b) 0 1 2 3 4

What will be the output of the following code?

```
x = 1
while x < 4:
    print(x, end=' ')
    x += 1
else:
    print("End")
```

a) 1 2 3
b) 1 2 3 End
c) 1 2 End
d) End
Answer: b) 1 2 3 End

What will be the output of the following code?
```
x = 10
if x < 10:
    print("Less than 10")
elif x == 10:
    print("Equal to 10")
else:
    print("Greater than 10")
```

a) Less than 10
b) Equal to 10
c) Greater than 10
d) None of the above
Answer: b) Equal to 10

What will be the output of the following code?
```
x = 5
if x > 10:
    print("Greater than 10")
elif x > 5:
    print("Greater than 5")
else:
    print("5 or less")
```

a) Greater than 10
b) Greater than 5
c) 5 or less
d) None of the above
Answer: c) 5 or less

What will be the output of the following code?

```
x = 10
if x > 10:
    print("Above ten")
else:
    print("Below or equal to ten")
```

a) Above ten
b) Below or equal to ten
c) Above ten Below or equal to ten
d) None of the above
Answer: b) Below or equal to ten

What will be the output of the following code?

```
x = 0
if x:
    print("True")
else:
    print("False")
```

a) True
b) False
c) Error
d) None of the above
Answer: b) False

What will be the output of the following code?
```
x = 15
if x > 10 and x < 20:
    print("Between 10 and 20")
else:
    print("Not between 10 and 20")
```

a) Between 10 and 20
b) Not between 10 and 20
c) Error
d) None of the above
Answer: a) Between 10 and 20

What will be the output of the following code?

```
x = 5
if x % 2 == 0:
    print("Even")
else:
    print("Odd")
```

a) Even
b) Odd

c) Error
d) None of the above
Answer: b) Odd

What will be the output of the following code?

```
a = 5
b = 10
if a + b > 10:
    print("Greater")
elif a + b == 10:
    print("Equal")
else:
    print("Lesser")
```

a) Greater
b) Equal
c) Lesser
d) None of the above
Answer: a) Greater

What will be the output of the following code?

```
x = 10
if x < 20:
    print("Less than 20")
if x < 15:
    print("Less than 15")
if x < 10:
    print("Less than 10")
```

a) Less than 20
b) Less than 20 Less than 15
c) Less than 20 Less than 15 Less than 10
d) None of the above
Answer: b) Less than 20 Less than 15

What will be the output of the following code?

```
x = 20
if x < 25:
    if x > 15:
        print("Between 15 and 25")
else:
    print("Outside range")
```

a) Between 15 and 25

b) Outside range

c) Error

d) None of the above

Answer: a) Between 15 and 25

What will be the output of the following code?

x = 8
if x > 5:
   print("Greater than 5")
   if x < 10:
     print("Less than 10")

a) Greater than 5

b) Less than 10

c) Greater than 5 Less than 10

d) None of the above

Answer: c) Greater than 5 Less than 10

What will be the output of the following code?

for i in range(3):
   for j in range(2):
     print(i, j)

a) 0 0

0 1

1 0

1 1

2 0

2 1

b) 0 1

1 0

1 1

2 0

2 1

c) 0 0

0 1

1 0

1 1

2 0

2 1

3 0

3 1

d) 0 0
0 1
1 0
1 1
Answer: a) 0 0
0 1
1 0
1 1
2 0
2 1

What will be the output of the following code?
```
for i in range(2):
   for j in range(3):
      print('*', end=' ')
   print()
```

a) * * *

_____

b) * *

   o   *
      c) * * *
            ■

d) *
*
Answer: a) * * *
* * *

What will be the output of the following code?
```
for i in range(3):
   for j in range(i):
      print(i, j)
```

a) 0 0
1 0
1 1
2 0
2 1
2 2
b) 1 0
2 0

2 1
c) 0 0
1 0
2 0
2 1
d) 1 1
2 2
Answer: b) 1 0
2 0
2 1

What will be the output of the following code?

```
for i in range(2):
    for j in range(2):
        for k in range(2):
            print(i, j, k)
```

a) 0 0 0
0 0 1
0 1 0
0 1 1
1 0 0
1 0 1
1 1 0
1 1 1
b) 0 0 0
1 1 1
c) 0 0 0
1 0 0
1 1 1
d) 0 1 0
1 0 1
1 1 0
Answer: a) 0 0 0
0 0 1
0 1 0
0 1 1
1 0 0
1 0 1
1 1 0
1 1 1

What will be the output of the following code?

```
for i in range(1, 4):
   for j in range(1, i+1):
      print('*', end='')
   print()
```

a) *
**

---

b) * * *

     ○   *

     ○

c) *

     ○   *

---

d) * * *

     ○   *

     ○

Answer: a) *
**
***

What will be the output of the following code?

```
for i in range(3):
   for j in range(3):
      if i == j:
         print(i, j)
```

a) 0 0
1 1
2 2
b) 0 0
0 1
0 2
1 0
1 1
1 2

2 0

2 1

2 2

c) 0 0

1 1

2 0

2 1

d) 1 0

1 1

2 2

Answer: a) 0 0

1 1

2 2

What will be the output of the following code?

```
for i in range(4):
    for j in range(4):
        if i + j == 3:
            print(i, j)
```

a) 0 3

1 2

2 1

3 0

b) 0 3

1 2

2 1

3 0

4 0

c) 1 3

2 2

3 1

d) 1 2

2 3

3 0

Answer: a) 0 3

1 2

2 1

3 0

What will be the output of the following code?

```python
for i in range(2, 4):
    for j in range(1, i):
        print(i * j, end=' ')
```

    a) 2 3 4
    b) 1 2 3
    c) 2 4 6
    d) 2 2 6
    Answer: d) 2 2 6

What will be the output of the following code?

```python
for i in range(3):
    for j in range(3):
        if i != j:
            print(i, j)
```

    a) 0 1
    0 2
    1 0
    1 2
    2 0
    2 1
    b) 0 0
    1 1
    2 2
    c) 1 2
    2 1
    d) 0 1
    0 2
    1 0
    1 2
    2 0
    2 1
    3 1
    Answer: a) 0 1
    0 2
    1 0
    1 2
    2 0
    2 1

What will be the output of the following code?

```
for i in range(2):
    for j in range(2):
        print(i, j)
        if j == 1:
            break
```

a) 0 0
0 1
1 0
1 1
b) 0 0
1 0
c) 0 0
0 1
d) 0 0
0 1
1 0
Answer: d) 0 0
0 1
1 0

What will be the output of the following code?

```
for i in range(5):
    if i % 2 == 0:
        print(i, end=' ')
```

a) 1 3
b) 0 2 4
c) 2 4
d) 1 2 3 4
Answer: b) 0 2 4

What will be the output of the following code?

```
for i in range(10):
    if i == 5:
        break
    print(i, end=' ')
```

a) 1 2 3 4 5
b) 0 1 2 3 4
c) 0 1 2 3

d) 0 1 2

Answer: b) 0 1 2 3 4

What will be the output of the following code?

```
for i in range(5):
    if i == 3:
        continue
    print(i, end=' ')
```

        a) 0 1 2 3 4
        b) 0 1 2 3
        c) 0 1 2 4
        d) 1 2 3 4
        Answer: c) 0 1 2 4

What will be the output of the following code?

```
for i in range(1, 10):
    if i % 3 == 0:
        print(i, end=' ')
```

        a) 3 6 9
        b) 1 2 3 4 5 6 7 8 9
        c) 1 2 4 5 7 8
        d) 3 6
        Answer: a) 3 6 9

What will be the output of the following code?

```
for i in range(2, 10, 2):
    if i > 5:
        print(i, end=' ')
```

        a) 2 4 6 8 10
        b) 2 4 6 8
        c) 6 8
        d) 4 6 8
        Answer: c) 6 8

What will be the output of the following code?

```
for i in range(1, 4):
    for j in range(1, 4):
        if i == j:
            print(i * j, end=' ')
```

a) 1 2 3
b) 1 4 9
c) 1 2 4
d) 1 3 9
Answer: b) 1 4 9

What will be the output of the following code?
```
for i in range(2, 5):
    for j in range(1, 3):
        if i % j == 0:
            print(i, j, end=' ')
```

a) 2 1 2 2 3 1 4 1 4 2
b) 2 1 3 1 4 1
c) 1 2 3 4 1
d) 2 2 3 3
Answer: a) 2 1 2 2 3 1 4 1 4 2

What will be the output of the following code?

```
for i in range(4):
    for j in range(3):
        if i + j > 3:
            break
        print(i, j, end=' ')
```

a) 0 0 0 1 0 2 0 3 1 0 1 1 1 2 2 0 2 1 3 0
b) 0 0 0 1 0 2 1 0 1 1 2 0 2 1 3 0
c) 0 0 0 1 0 2 1 0 1 1 2 0 3 0
d) 0 1 2 0 1 0 2
Answer: b) 0 0 0 1 0 2 1 0 1 1 2 0 2 1 3 0

What will be the output of the following code?

```
for i in range(1, 5):
    if i % 2 == 0:
        print(i, end=' ')
    else:
        print(i * 2, end=' ')
```

a) 2 4 6 8
b) 1 2 3 4

c) 2 2 6 4
d) 2 4 6
Answer: c) 2 2 6 4

What will be the output of the following code?

```python
for i in range(3):
   for j in range(3):
     if i + j < 2:
        print(i, j, end=' ')
```

      a) 0 0 0 1 1 0
      b) 0 0 0 1 0 2
      c) 0 1 1 0 1 2
      d) 0 0 0 1
      Answer: d) 0 0 0 1

What will be the output of the following code?
```python
x = 10
if x > 5:
   if x > 8:
     print("More than 8")
   else:
     print("8 or less")
```
a) 8 or less
b) More than 8
c) Error
d) None of the above
Answer: b) More than 8

What will be the output of the following code?
```python
x = 5
if x < 10:
   if x > 2:
     print("Between 2 and 10")
```
a) Between 2 and 10
b) Error
c) None
d) 2 and 10
Answer: a) Between 2 and 10

What will be the output of the following code?

```
x = 3
if x % 2 == 0:
    if x < 5:
        print("Even and less than 5")
    else:
        print("Even and more than 5")
else:
    print("Odd number")
```
a) Even and less than 5
b) Even and more than 5
c) Odd number
d) Error
Answer: c) Odd number

What will be the output of the following code?
```
x = 10
if x > 5:
    if x < 20:
        print("Between 5 and 20")
    else:
        print("More than 20")
```
a) Between 5 and 20
b) More than 20
c) Error
d) None of the above
Answer: a) Between 5 and 20

What will be the output of the following code?

```
x = 2
if x < 5:
    if x > 1:
        print("Between 1 and 5")
```
a) Between 1 and 5
b) Error
c) None
d) 1 and 5
Answer: a) Between 1 and 5

What will be the output of the following code?

```
x = 8
if x > 0:
    if x % 2 == 0:
        print("Positive even number")
    else:
        print("Positive odd number")
```
a) Positive even number
b) Positive odd number
c) Error
d) None of the above
Answer: a) Positive even number

What will be the output of the following code?

```
x = 3
if x > 0:
    if x % 2 == 0:
        print("Positive even number")
    else:
        print("Positive odd number")
```
a) Positive even number
b) Positive odd number
c) Error
d) None of the above
Answer: b) Positive odd number

What will be the output of the following code?

```
x = 7
if x % 2 == 0:
    if x > 5:
        print("Even and more than 5")
    else:
        print("Even and less than 5")
else:
    print("Odd number")
```
a) Even and more than 5
b) Even and less than 5
c) Odd number
d) Error
Answer: c) Odd number

What will be the output of the following code?

```python
x = 15
if x < 20:
    if x % 3 == 0:
        print("Divisible by 3")
```

a) Divisible by 3
b) Error
c) None
d) Not Divisible
Answer: a) Divisible by 3

What will be the output of the following code?

```python
x = 11
if x % 2 == 0:
    if x < 10:
        print("Even and less than 10")
    else:
        print("Even and more than 10")
else:
    print("Odd number")
```

a) Even and less than 10
b) Even and more than 10
c) Odd number
d) Error
Answer: c) Odd number

What will be the output of the following code?

```python
for i in range(2, 6):
    print(i, end=' ')
```

a) 2 3 4 5
b) 2 3 4 5 6
c) 1 2 3 4 5
d) 2 4 6
Answer: a) 2 3 4 5

What will be the output of the following code?

```python
for i in range(1, 10, 2):
    print(i, end=' ')
```

a) 1 3 5 7 9
b) 1 2 3 4 5 6 7 8 9
c) 1 3 5 7
d) 2 4 6 8
Answer: a) 1 3 5 7 9

What will be the output of the following code?
for i in range(5):
    print(i * i, end=' ')

a) 0 1 4 9 16
b) 0 2 4 6 8
c) 0 1 2 3 4
d) 1 4 9 16 25
Answer: a) 0 1 4 9 16

What will be the output of the following code?
for i in range(3):
    print(i, end=' ')
else:
    print('End')

a) 0 1 2
b) 0 1 2 End
c) End
d) 1 2 3 End
Answer: b) 0 1 2 End

What will be the output of the following code?
for i in range(4, 1, -1):
    print(i, end=' ')

a) 4 3 2 1
b) 4 3 2
c) 4 3
d) 4 3 2 1 0
Answer: b) 4 3 2

What will be the output of the following code?

for i in range(3):
    print(i, i*2, end=' ')

a) 0 0 1 2 2 4
b) 0 1 2 4 5 10
c) 0 0 2 4
d) 0 2 4
Answer: a) 0 0 1 2 2 4

What will be the output of the following code?
for i in range(5, 0, -1):
   print('*' * i)

a) *
**
***
****
*****
b) *****
****
***
**
*
c) *
*
*
*
d) *****
*****
*****
*****
*****
Answer: b) *****
****
***
**
*

What will be the output of the following code?
for i in range(1, 6):
   print(i + 2, end=' ')

a) 3 4 5 6 7
b) 3 4 5 6
c) 2 3 4 5 6

d) 3 4 5 6 7 8
Answer: a) 3 4 5 6 7

What will be the output of the following code?

```
for i in range(3):
   for j in range(2):
      print(i, j, end=' ')
```

a) 0 0 0 1 1 0 1 1 2 0 2 1
b) 0 1 1 2 2 3
c) 0 0 1 1 2 2
d) 0 0 1 1 2 2 3 3
Answer: a) 0 0 0 1 1 0 1 1 2 0 2 1

What will be the output of the following code?
```
for i in range(4):
   for j in range(3):
      print(i * j, end=' ')
```

a) 0 0 0 0 0 0 0 0 0 0 0 0
b) 0 0 0 0 1 2 0 2 4 0 3 6
c) 1 2 3 4 5 6 7 8 9
d) 0 0 0 0 1 2 0 2 4
Answer: b) 0 0 0 0 1 2 0 2 4 0 3 6

What will be the output of the following code?

```
i = 0
while i < 4:
   print(i, end=' ')
   i += 1
```

a) 0 1 2
b) 0 1 2 3 4
c) 0 1 2 3
d) 1 2 3 4
Answer: c) 0 1 2 3

What will be the output of the following code?

```
i = 5
while i > 0:
```

```
    print(i, end=' ')
  i -= 1
```

        a) 5 4 3 2 1
        b) 5 4 3 2 1 0
        c) 4 3 2 1 0
        d) 5 4 3 2 1 0 -1
        Answer: a) 5 4 3 2 1

What will be the output of the following code?

```
i = 1
while i <= 5:
   print(i * i, end=' ')
   i += 1
```

        a) 1 4 9 16 25
        b) 1 2 3 4 5
        c) 1 2 4 9 16 25
        d) 1 4 9 16
        Answer: a) 1 4 9 16 25

What will be the output of the following code?

```
i = 0
while i < 3:
   print(i)
   i += 1
else:
   print('End')
```

        a) 0 1 2
        b) 0 1 2 End
        c) End
        d) 1 2 3 End
        Answer: b) 0 1 2 End

What will be the output of the following code?

```
i = 1
while i <= 4:
   print('*' * i)
   i += 1
```

        a) *
        **

b) ****

**

*

c) *

*

*

*

d) *

**

Answer: d) *

**

***

****

What will be the output of the following code?
for i in range(3):
   for j in range(2):
      print(i, j, end=' ')
a) 0 0 0 1 1 0 1 1 2 0 2 1
b) 0 1 1 2 2 0
c) 0 0 1 1 2 2
d) 0 1 0 1 0 1
Answer: a) 0 0 0 1 1 0 1 1 2 0 2 1

What will be the output of the following code?
for i in range(2):
   for j in range(2):
      print(i + j, end=' ')
a) 0 1 1 2
b) 0 1 2 3
c) 1 2 3 4
d) 0 1 1 2
Answer: d) 0 1 1 2

What will be the output of the following code?
for i in range(3):

```
    for j in range(i):
        print(j, end=' ')
```
a) 0 0 1 0 1 2
b) 0 1 2
c) 0 0 1
d) 1 2 3
Answer: c) 0 0 1

What will be the output of the following code?
```
for i in range(2):
    for j in range(2):
        print(i * j, end=' ')
```
a) 0 1 1 2
b) 0 0 0 1
c) 0 1 2 3
d) 0 0 1 1
Answer: b) 0 0 0 1

What will be the output of the following code?
```
for i in range(2):
    for j in range(2):
        print(i, j)
```
a) 0 0 0 1 1 0 1 1
b) 0 0 1 0 0 1
c) 1 1 1 1
d) 0 0 0 1 1 0 1 1
Answer: a) 0 0 0 1 1 0 1 1

What will be the output of the following code?


```
for i in range(2):
    for j in range(2):
        if i == j:
            print(i, j)
```
a) 0 0 1 1
b) 0 1 1 0
c) 0 0
d) 1 1
Answer: a) 0 0 1 1

What will be the output of the following code?

```
for i in range(2):
    for j in range(2):
        if i != j:
            print(i, j)
```

a) 0 1 1 0
b) 0 0 1 1
c) 1 1
d) 0 0

Answer: a) 0 1 1 0

What will be the output of the following code?

```
for i in range(3):
    for j in range(3):
        if i + j < 3:
            print(i, j, end=' ')
```

a) 0 0 0 1 0 2 1 0 1 1 1 2
b) 0 0 0 1 1 0 1 1
c) 0 0 0 1 1 0 2 0 2 1
d) 0 0 0 1 1 0

Answer: d) 0 0 0 1 1 0

What will be the output of the following code?

```
for i in range(2):
    for j in range(2):
        for k in range(2):
            print(i, j, k, end=' ')
```

a) 0 0 0 0 0 1 0 1 0 0 1 1 1 0 0 1 0 1 1 1
b) 0 0 0 0 1 0 1 1 0 1 0 1 1
c) 0 1 1 1 1 0 1 1 0 0
d) 0 0 0 1 1 1

Answer: a) 0 0 0 0 0 1 0 1 0 0 1 1 1 0 0 1 0 1 1 1

What will be the output of the following code?

```
for i in range(2):
    for j in range(2):
        if i == 0 and j == 1:
            break
        print(i, j, end=' ')
```

a) 0 0
b) 0 0 1 0

c) 0 0 0 1
d) 0 1
Answer: a) 0 0

What will be the output of the following code?

```
x = 5
if x > 3:
    print("Greater than 3")
```
a) Greater than 3
b) 3
c) 5
d) None
Answer: a) Greater than 3

What will be the output of the following code?
```
x = 2
if x < 3:
    print("Less than 3")
```
a) 3
b) Less than 3
c) 2
d) None
Answer: b) Less than 3

What will be the output of the following code?
```
x = 10
if x == 10:
    print("Equal to 10")
```
a) 10
b) Equal to 10
c) 1
d) None
Answer: b) Equal to 10

What will be the output of the following code?
```
x = 7
if x != 5:
    print("Not equal to 5")
```
a) 5
b) 7
c) Not equal to 5

d) None
Answer: c) Not equal to 5

What will be the output of the following code?
x = 4
if x >= 4:
    print("Greater than or equal to 4")
a) 4
b) Greater than or equal to 4
c) None
d) Error
Answer: b) Greater than or equal to 4

What will be the output of the following code?
x = 6
if x <= 6:
    print("Less than or equal to 6")
a) 6
b) Less than or equal to 6
c) None
d) Error
Answer: b) Less than or equal to 6
What will be the output of the following code?
x = 8
if x > 7:
    print("Greater than 7")
else:
    print("Not greater than 7")
a) Greater than 7
b) Not greater than 7
c) 7
d) 8
Answer: a) Greater than 7

What will be the output of the following code?

x = 3
if x < 5:
    print("Less than 5")
else:
    print("Not less than 5")

a) Less than 5
b) Not less than 5
c) 3
d) 5
Answer: a) Less than 5

What will be the output of the following code?

```
x = 10
if x == 10:
    print("Exactly 10")
else:
    print("Not exactly 10")
```
a) Exactly 10
b) Not exactly 10
c) 10
d) None
Answer: a) Exactly 10

What will be the output of the following code?

```
x = 9
if x != 8:
    print("Not 8")
else:
    print("8")
```
a) Not 8
b) 8
c) 9
d) None
Answer: a) Not 8

What will be the output of the following code?

```
i = 1
while i <= 5:
    print(i, end=' ')
    i += 1
```
a) 1 2 3 4 5
b) 1 2 3 4 5 6
c) 1 2 3 4

d) 2 3 4 5 6
Answer: a) 1 2 3 4 5

What will be the output of the following code?
i = 0
while i < 3:
    print("Python", end=' ')
    i += 1
a) Python
b) Python Python Python
c) Python Python
d) Python Python Python Python
Answer: b) Python Python Python

What will be the output of the following code?

i = 3
while i > 0:
    print(i, end=' ')
    i -= 1
a) 3 2 1
b) 1 2 3
c) 3 2 1 0
d) 3 2 1 0 -1
Answer: a) 3 2 1

What will be the output of the following code?

i = 1
while i <= 5:
    if i % 2 == 0:
        print(i, end=' ')
    i += 1
a) 1 2 3 4 5
b) 2 4
c) 2 4 6
d) 1 3 5
Answer: b) 2 4

What will be the output of the following code?

i = 5

```
while i > 0:
    print(i)
    i -= 1
```
a) 5 4 3 2 1
b) 1 2 3 4 5
c) 5 4 3 2 1 0
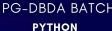d) 0 1 2 3 4 5
Answer: a) 5 4 3 2 1

What will be the output of the following code?

```
i = 0
while i < 5:
    print(i, end=' ')
    i += 2
```
a) 0 1 2 3 4
b) 0 2 4
c) 0 2 4 6
d) 1 3 5
Answer: b) 0 2 4

What will be the output of the following code?
```
i = 10
while i >= 5:
    print(i, end=' ')
    i -= 1
```
a) 10 9 8 7 6
b) 10 9 8 7 6 5
c) 10 9 8 7 6 5 4
d) 5 6 7 8 9 10
Answer: b) 10 9 8 7 6 5

What will be the output of the following code?

```
i = 1
while i < 4:
    print(i)
    i += 1
```
a) 1 2 3
b) 1 2 3 4
c) 1 2 3 4 5

d) 1 2
Answer: a) 1 2 3

What will be the output of the following code?

```
i = 2
while i <= 8:
    print(i, end=' ')
    i += 2
```
a) 2 4 6 8
b) 2 4 6 8 10
c) 1 3 5 7 9
d) 2 3 4 5 6 7 8
Answer: a) 2 4 6 8

What will be the output of the following code?

```
i = 0
while i < 5:
    if i % 2 != 0:
        print(i, end=' ')
    i += 1
```
a) 1 3
b) 0 2 4
c) 1 2 3
d) 1 3 5
Answer: a) 1 3

What will be the output of the following code?

```
for i in range(1, 6):
    print(i, end=' ')
```
a) 1 2 3 4 5
b) 0 1 2 3 4
c) 1 2 3 4 5 6
d) 2 3 4 5 6
Answer: a) 1 2 3 4 5

What will be the output of the following code?

```
for i in range(5, 0, -1):
    print(i, end=' ')
```

a) 1 2 3 4 5
b) 5 4 3 2 1
c) 5 4 3 2 1 0
d) 0 1 2 3 4 5
Answer: b) 5 4 3 2 1

What will be the output of the following code?

for i in range(2, 7, 2):
   print(i, end=' ')
a) 2 4 6 8
b) 2 4 6
c) 2 4 6 7
d) 1 2 3 4 5 6
Answer: b) 2 4 6

What will be the output of the following code?
for i in range(3):
   print("Hello")
a) Hello
Hello
Hello
b) Hello
c) Hello Hello Hello
d) None
Answer: a) Hello
Hello
Hello

What will be the output of the following code?
sum = 0
for i in range(1, 5):
   sum += i
print(sum)
a) 15
b) 10
c) 11
d) 9
Answer: b) 10

What will be the output of the following code?
product = 1

```
for i in range(1, 5):
    product *= i
print(product)
```
a) 10
b) 24
c) 15
d) 20
Answer: b) 24

What will be the output of the following code?
```
for i in range(3):
    for j in range(2):
        print(i, j, end=' ')
```
a) 0 0 0 1 1 0 1 1 2 0 2 1
b) 0 1 1 2 2 0
c) 0 0 1 1 2 2
d) 0 1 0 1 0 1
Answer: a) 0 0 0 1 1 0 1 1 2 0 2 1

What will be the output of the following code?

```
for i in range(5):
    if i % 2 == 0:
        print(i, end=' ')
```
a) 0 2 4
b) 1 3 5
c) 1 2 3 4
d) 0 1 2 3 4
Answer: a) 0 2 4

What will be the output of the following code?

```
result = 0
for i in range(1, 6):
    result += i
print(result)
```
a) 10
b) 15
c) 20
d) 21
Answer: b) 15

What will be the output of the following code?

```
for i in range(2, 10, 2):
    print(i, end=' ')
```

a) 2 4 6 8 10

b) 2 4 6 8

c) 1 3 5 7 9

d) 2 4 6 8 9

Answer: b) 2 4 6 8

What will be the output of the following code?

```
for i in range(5):
    if i % 2 == 0:
        print(i, end=' ')
```

a) 0 1 2 3 4

b) 1 3 5

c) 0 2 4

d) 2 4

Answer: c) 0 2 4

What will be the output of the following code?

```
for i in range(5):
    if i % 2 != 0:
        print(i, end=' ')
```

a) 0 2 4

b) 1 3

c) 0 1 2 3 4

d) 1 3 5

Answer: b) 1 3

What will be the output of the following code?

```
for i in range(5):
    if i % 2 == 1:
        print(i, end=' ')
```

a) 1 3

b) 0 2 4

c) 1 2 3

d) 0 1 2 3 4

Answer: a) 1 3

What will be the output of the following code?

```
for i in range(5):
    if i % 2 == 0:
```

```
    print(i, end=' ')
  else:
    print("Odd", end=' ')
```
a) 0 2 4
b) 0 Odd 2 Odd 4
c) 0 1 2 3 4
d) Odd Odd Odd
Answer: b) 0 Odd 2 Odd 4

What will be the output of the following code?
```
for i in range(1, 6):
  if i % 3 == 0:
    print(i, end=' ')
```
a) 1 2 3 4 5
b) 1 2 4 5
c) 3 6
d) 3
Answer: d) 3

What will be the output of the following code?

```
for i in range(1, 10):
  if i % 3 == 0:
    print(i, end=' ')
```
a) 1 2 4 5 7 8
b) 1 3 5 7 9
c) 3 6 9
d) 2 4 6 8
Answer: c) 3 6 9

What will be the output of the following code?

```
for i in range(1, 10):
  if i % 4 == 0:
    print(i, end=' ')
```
a) 4 8
b) 3 6 9
c) 4 6 8
d) 2 4 6 8
Answer: a) 4 8

What will be the output of the following code?

```
for i in range(10):
    if i % 2 == 0 and i % 3 == 0:
        print(i, end=' ')
```
a) 0 2 3 4 6
b) 2 4 6 8
c) 0 6
d) 3 6 9
Answer: c) 0 6

What will be the output of the following code?

```
for i in range(1, 10):
    if i % 5 == 0:
        print(i, end=' ')
```
a) 5 10
b) 5
c) 5 6
d) 6 7 8
Answer: b) 5

What will be the output of the following code?

```
for i in range(1, 10):
    if i % 7 == 0:
        print(i, end=' ')
```
a) 7
b) 5 7
c) 7 8
d) 5 6
Answer: a) 7

Python is known as:

A compiled language
An interpreted language
A machine language
An assembly language

Is Python code compiled or interpreted?

a) Python code is both compiled and interpreted

b) Python code is neither compiled nor interpreted

c) Python code is only compiled

d) Python code is only interpreted

What will be the value of the following Python expression?

4+3%5

a) 7

b) 2

c) 4

d) 1

What will be the output of the following Python code?

```
i = 1
while True:
    if i%3 == 0:
        break
    print(i)

    i += 1
```
a) 1 2 3

b) error

c) 1 2

d) none of the mentioned

What will be the output of the following Python code snippet if x=1?

x<<2

a) 4

b) 2

c) 1

d) 8

Ans: a

What are the values of the following Python expressions?

 2**(3**2)
 (2**3)**2
 2**3**2
a) 512, 64, 512
b) 512, 512, 512
c) 64, 512, 64
d) 64, 64, 64
Answer: a

What will be the output of the following Python code?

l=[1, 0, 2, 0, 'hello', '', []]
list(filter(bool, l))
a) [1, 0, 2, 'hello', '', []]
b) Error
c) [1, 2, 'hello']
d) [1, 0, 2, 0, 'hello', '', []]
Answer: c

The following python program can work with _____ parameters.

def f(x):
   def f1(*args, **kwargs):
       print("Sanfoundry")
       return x(*args, **kwargs)
   return f1
a) any number of
b) 0
c) 1
d) 2

Answer: a

What will be the output of the following Python function?

min(max(False,-3,-4), 2,7)
a) -4
b) -3
c) 2
d) False

Answer: d

What will be the output of the following Python function?

len(["hello",2, 4, 6])
a) Error
b) 6
c) 4
d) 3

Answer: c

What will be the output of the following Python code?

x = 'abcd'
for i in x:
    print(i.upper())
a)

a
B
C
D
b) a b c d
c) error
d)

A
B
C
D

Answer: d

What will be the output of the following Python code snippet?

for i in [1, 2, 3, 4][::-1]:
    print(i, end=' ')
a) 4 3 2 1
b) error
c) 1 2 3 4
d) none of the mentioned

Answer: a

What will be the output of the following Python code?

```
class tester:
    def __init__(self, id):
        self.id = str(id)
        id="224"

>>>temp = tester(12)
>>>print(temp.id)
```

a) 12
b) 224
c) None
d) Error
Answer: a

What will be the output of the following Python program?

```
def foo(x):
    x[0] = ['def']
    x[1] = ['abc']
    return id(x)
q = ['abc', 'def']
print(id(q) == foo(q))
```

a) Error
b) None
c) False
d) True

Answer:d

What will be the output of the following Python program?

```
z=set('abc')
z.add('san')
z.update(set(['p', 'q']))
z
```

a) {'a', 'c', 'c', 'p', 'q', 's', 'a', 'n'}
b) {'abc', 'p', 'q', 'san'}
c) {'a', 'b', 'c', 'p', 'q', 'san'}

d) {'a', 'b', 'c', ['p', 'q'], 'san}

Answer:c

What will be the output of the following Python code?

print("abc. DEF".capitalize())
a) Abc. def
b) abc. def
c) Abc. Def
d) ABC. DEF

Ans:a

What will be the value of 'result' in following Python program?

list1 = [1,2,3,4]
list2 = [2,4,5,6]
list3 = [2,6,7,8]
result = list()
result.extend(i for i in list1 if i not in (list2+list3) and i not in result)
result.extend(i for i in list2 if i not in (list1+list3) and i not in result)
result.extend(i for i in list3 if i not in (list1+list2) and i not in result)
a) [1, 3, 5, 7, 8]
b) [1, 7, 8]
c) [1, 2, 4, 7, 8]
d) error

Answer: a

What will be the output of the following Python code?

print('*', "abcde".center(6), '*', sep='')
a) * abcde *
b) *abcde *
c) * abcde*
d) * abcde *

Ans:b

What will be the output of the following Python program?

```
i = 0
while i < 5:
    print(i)
    i += 1
    if i == 3:
        break
else:
    print(0)
```
a) error
b) 0 1 2 0
c) 0 1 2
d) none of the mentioned
Answer: c

What will be the output of the following Python code?

```
x = 'abcd'
for i in range(len(x)):
    print(i)
```
a) error
b) 1 2 3 4
c) a b c d
d) 0 1 2 3
Ans:d

What will be the output of the following Python program?

```
def addItem(listParam):
    listParam += [1]

mylist = [1, 2, 3, 4]
addItem(mylist)
print(len(mylist))
```
a) 5
b) 8
c) 2
d) 1

Answer:A

What will be the output of the following Python code snippet?

z=set('abc$de')

'a' in z

a) Error

b) True

c) False

d) No output

Ans:b