Start coding or generate with AI.

1. Create a set with the rst ve prime numbers.

Double-click (or enter) to edit

2. Add the number 7 to the set.

```
A = {2,3,5,7,11}
A.add(8)
print(A)
```

 $\longrightarrow \{2, 3, 5, 7, 8, 11\}$

4. Check if the set is a subset of {2, 3, 5, 7, 11}.

```
A = {2, 3, 5, 7, 11}
B = {2, 3, 5, 7}
print(A.issubset(B))
```

→ False

5. Find the union of the set with {7, 11, 13}.

```
A = {2,3,5,7,11}
B = {7,11,13}
print(A.union (B))
```

6. Create a frozen set from the original set

```
s = frozenset({1,2,5,4,8,9})
print(s)

frozenset({1, 2, 4, 5, 8, 9})
```

7. Check if the set has any common elements with {1, 4, 9}.

```
A = {2,3,5,7,11}
A.intersection({1,4,9})
```

→ set()

8. Remove all elements from the set.

```
A = {2,4,6,8,7,9}
A.clear()
print(A)
```

→ set()

9. Create a set of your favorite fruits and nd the intersection with { 'apple', 'banana', 'orange' }

10. Use set comprehension to create a set of squares for numbers 1 to 10 $\,$

```
sqares_set = {x**2 for x in range(1,11)}
print(sqares_set)

$\frac{1}{2}$ {64, 1, 4, 36, 100, 9, 16, 49, 81, 25}
```

LISTS

1. Create a list of integers from 1 to 5.

```
A = [1,2,3,4,5]
print(A)

[1, 2, 3, 4, 5]
```

2. Append the number 6 to the list.

```
A = [1,2,3,4,5]
A.append(6)
print(A)

[1, 2, 3, 4, 5, 6]
```

3. Extend the list with another list: [7, 8, 9]

```
A = [1,2,3,4,5]
B = [7,8,9]
A.extend(B)
print(A)
```

4. Access and print the third element of the list.

```
A = [1,2,3,4,5]
print(A[2])
```

→ 3