Lab Set

Data We Want to Organize

You are given a dataset as below represented as a list. You should organize them in the required data structure in following tasks.

```
SIZE = 48
```

```
names = ['STU' + str(i) for i in range(100,100+SIZE)]
names
```

```
['STU100',
 'STU101',
 'STU102',
 'STU103',
 'STU104',
 'STU105',
 'STU106',
 'STU107',
 'STU108',
 'STU109',
 'STU110',
 'STU111',
 'STU112',
 'STU113',
 'STU114',
 'STU115',
 'STU116',
 'STU117',
 'STU118',
 'STU119',
 'STU120',
 'STU121',
 'STU122',
 'STU123',
 'STU124',
 'STU125',
 'STU126',
 'STU127',
 'STU128',
 'STU129',
 'STU130',
 'STU131',
 'STU132',
 'STU133',
 'STU134',
 'STU135',
 'STU136',
 'STU137',
 'STU138',
 'STU139',
 'STU140',
 'STU141',
 'STU142',
 'STU143',
 'STU144',
 'STU145',
 'STU146',
 'STU147']
```

```
import random

scores1 = [random.randint(60, 100) for i in range(SIZE) ]
scores1
```

```
[60,
 73,
 80,
 85,
 94,
 62,
 85,
 72,
 77,
 69,
 92,
 69,
 72,
 61,
 60,
 73,
 71,
 78,
 73,
 99,
 73,
 79,
 85,
 60,
 66,
 81,
 91,
 90,
 85,
 62,
 100,
 66,
 90,
 67,
 61,
 89,
 97,
 91,
 71,
 79,
 69,
 86,
 80,
 93,
 78,
 68,
 71,
 62]
```

```
scores2 = [random.randint(60, 100) for i in range(SIZE) ]
scores2
```

```
[96,
 61,
 81,
 81,
 88,
 81,
 62,
 100,
 94,
 70,
 81,
 80,
 65,
 77,
 68,
 79,
 74,
 79,
 99,
 97,
 77,
 97,
 93,
 64,
 74,
 96,
 61,
 93,
 65,
 82,
 77,
 90,
 69,
 65,
 61,
 86,
 66,
 65,
 97,
 89,
 76,
 100,
 71,
 69,
 78,
 100,
 71,
 73]
```

Set

Task: We have `scores1` and `scores2`. Convert them to `set1` and `set2`

```
set1 = set(scores1)
set1
```

```
{60,
 61,
 62,
 66,
 67,
 68,
 69,
 71,
 72,
 73,
 77,
 78,
 79,
 80,
 81,
 85,
 86,
 89,
 90,
 91,
 92,
 93,
 94,
 97,
 99,
 100}
```

```
set2 = set(scores2)
set2
```

```
{61,
 62,
 64,
 65,
 66,
 68,
 69,
 70,
 71,
 73,
 74,
 76,
 77,
 78,
 79,
 80,
 81,
 82,
 86,
 88,
 89,
 90,
 93,
 94,
 96,
 97,
 99,
 100}
```

Task: Print the unique score in scores1 and unique score in scores2

```
print(set1, set2)
```

```
{60, 61, 62, 66, 67, 68, 69, 71, 72, 73, 77, 78, 79, 80, 81, 85, 86, 89, 90, 9
```

Task: Print the union of `set1` and `set2`

```
print(set1.union(set2))
```

```
{60, 61, 62, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 76, 77, 78, 79, 80, 8
```

Task: Print the intersection of `set1` and `set2`

```
print(set1.intersection(set2))
```

```
{61, 62, 66, 68, 69, 71, 73, 77, 78, 79, 80, 81, 86, 89, 90, 93, 94, 97, 99, 1
```

Task: Print the difference of `set1` and `set2`

```
print(set1.difference(set2))
```

```
{67, 72, 92, 85, 91, 60}
```