

모범 답안

자율과제 1의 모범 답안입니다.

주민번호 분석

calculators/resident_number_analyzer.py

```
1 print("주민등록번호 분석기 프로그램입니다!")
2
3 resident_number = input("주민번호를 입력해주세요 : ")
4
5 # 생년 월일 탐색
6 birth_year = resident_number[0:2]
7 birth_month = resident_number[2:4]
8 birth_day = resident_number[4:6]
9
10 # 성별 탐색
11 if resident_number[6] == '1' or resident_number[6] == '3':
12     sex = '남자'
13 elif resident_number[6] == '2' or resident_number[6] == '4':
14     sex = '여자'
15 else:
16     sex = '중성'
17
18 # 지역 탐색
19 local_code = resident_number[7:9]
20 local_code = int(local_code)
21
22 if 0 <= local_code <= 8:
23     local = '서울특별시'
24 elif 9 <= local_code <= 12:
25     local = '부산광역시'
26 elif 13 <= local_code <= 15:
27     local = '인천광역시'
28 elif 16 <= local_code <= 25:
29     local = '경기도'
30 elif 26 <= local_code <= 34:
31     local = '강원도'
32 elif 35 <= local_code <= 39:
33     local = '충청북도'
34 elif local_code == 40:
35     local = '대전광역시'
36 elif 41 <= local_code <= 43 or 45 <= local_code <= 47:
37     local = '충청남도'
38 elif local_code == 44 or local_code == 96:
```

```
39     local = '세종특별자치시'
40 elif 48 <= local_code <= 54:
41     local = '전라북도'
42 elif 57 <= local_code <= 66:
43     local = '전라남도'
44 elif 55 <= local_code <= 56:
45     local = '광주광역시'
46 elif 67 <= local_code <= 70:
47     local = '대구광역시'
48 elif 71 <= local_code <= 81:
49     local = '경상북도'
50 elif 82 <= local_code <= 84 or 86 <= local_code <= 90:
51     local = '경상남도'
52 elif local_code == 85:
53     local = '울산광역시'
54 else:
55     local = '제주특별자치도'
56
57 # 주민번호로부터 정보 출력
58 print("생년월일 : " + birth_year + "년 " + birth_month + "월 " + birth_day + '
59 print("성별 : " + sex)
60 print("출생지역 : " + local)
61
62
63 # 유효성 검증
64 magic_key = 11
65 hidden_numbers = [2, 3, 4, 5, 6, 7, 8, 9, 2, 3, 4, 5]
66 middle_number = 0
67
68 for index in range(len(hidden_numbers)):
69     middle_number = middle_number + int(resident_number[index]) * hidden_nur
70
71 value = magic_key - (middle_number % magic_key)
72
73 if str(value) == resident_number[-1]:
74     print("유효한 주민번호입니다.")
75 else:
76     print("유효하지 않은 주민번호입니다.")
```