~\Downloads\# Initial list of Justice League members.py

```
# Initial list of Justice League members
 2
   justice league = [
 3
        "Superman",
 4
        "Batman",
        "Wonder Woman",
 5
 6
        "Flash",
 7
        "Aquaman",
        "Green Lantern"
 8
9
   ]
10
11
   # 1. Calculate the number of members in the Justice League
    num members = len(justice league)
12
    print(f"Number of members in the Justice League: {num members}")
13
14
   # 2. Add Batgirl and Nightwing to the list
15
   justice league.append("Batgirl")
16
17
    justice_league.append("Nightwing")
   print(f"After adding Batgirl and Nightwing: {justice league}")
18
19
20
   # 3. Move Wonder Woman to the beginning of the list
   justice league.remove("Wonder Woman")
21
    justice_league.insert(0, "Wonder Woman")
22
    print(f"After moving Wonder Woman to the beginning: {justice league}")
23
24
   # 4. Move either "Green Lantern" or "Superman" between Aquaman and Flash
25
   # Let's choose "Green Lantern" for this example
26
27
   justice league.remove("Green Lantern")
28
   flash_index = justice_league.index("Flash")
    justice_league.insert(flash_index, "Green Lantern")
29
    print(f"After moving Green Lantern between Aquaman and Flash: {justice_league}")
30
31
32
   # 5. Replace the existing list with new members
33
    new_members = [
        "Cyborg",
34
        "Shazam",
35
        "Hawkgirl",
36
        "Martian Manhunter",
37
        "Green Arrow"
38
39
    justice league = new members
40
    print(f"After replacing the list with new members: {justice league}")
41
42
43
   # 6. Sort the list alphabetically and determine the new leader
44
    justice league.sort()
    print(f"After sorting alphabetically: {justice league}")
45
46
   # BONUS: Predict the new leader
47
   new_leader = justice_league[0]
```

49 print(f"The new leader of the Justice League is: {new_leader}")
50