

Pseudocode:

```
1 GET inputNameArray from input file
2 outputNameArray ← []
3 previousName ← none
4 FOR name in inputNameArray
5     IF name != previousName
6         APPEND name to outputNameArray
7     previousName ← name
8 WRITE outputNameArray to output file
```

Trace:

Line Number	inputNameArray	outputNameArray	previousName	name
1	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	/	/	/
2	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl		/	/
3	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl			/
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl			Adam
6	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam		Adam
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam	Adam	Adam
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam	Adam	Brody
6	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody	Adam	Brody
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody	Brody	Brody
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody	Brody	Brody
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody	Brody	Brody
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody	Brody	Coy
6	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy	Brody	Coy
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy	Coy	Coy
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy	Coy	Coy
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy	Coy	Coy
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy	Coy	Dave
6	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave	Coy	Dave
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave	Dave	Dave
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave	Dave	Earl
6	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave, Earl	Dave	Earl
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave, Earl	Earl	Earl
4	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave, Earl	Earl	Earl
7	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave, Earl	Earl	Earl
8	Adam, Brody, Brody, Coy, Coy, Dave, Earl, Earl	Adam, Brody, Coy, Dave, Earl	Earl	Earl

Efficiency:

```
1 GET inputNameArray from input file
2 outputNameArray ← []           // O(1)
3 previousName ← none           // O(1)
4 FOR name in inputNameArray     // O(n)
5     IF name != previousName   // O(1)
6         APPEND name to outputNameArray // O(1)
7     previousName ← name       // O(1)
8 WRITE outputNameArray to output file
```

Overall efficiency: **O(n)** because of the single FOR loop