

Name \_\_\_\_\_ Student ID \_\_\_\_\_

### Level 1 (if completed, 2 point with no function, 3 points with properly used functions)

Requirements:

1. Input munu characters (n,N,s,S,Q,q) can accept both upper and lower cases.
2. Using Python list is required.

#### Example 1:

```
(N)ew (Q)uit : k
Incorrect Menu
(N)ew (Q)uit : n
Name : Jitti
Jitti added
(N)ew (S)how (Q)uit : s
(1) Jitti
(N)ew (S)how (Q)uit : N
Name : John Doe
John Doe added
(N)ew (S)how (Q)uit : s
(1) Jitti
(2) John Doe
(N)ew (S)how (Q)uit : h
Incorrect Menu
(N)ew (S)how (Q)uit : n
Name : Tango
Tango added
(N)ew (S)how (Q)uit : S
(1) Jitti
(2) John Doe
(3) Tango
(N)ew (S)how (Q)uit : q
Bye
```

#### Example 2:

```
(N)ew (Q)uit : N
Name : Animals
Animals added
(N)ew (S)how (Q)uit : s
(1) Animals
(N)ew (S)how (Q)uit : N
Name : Trees
Trees added
(N)ew (S)how (Q)uit : s
(1) Animals
(2) Trees
(N)ew (S)how (Q)uit : e
Incorrect Menu
(N)ew (S)how (Q)uit : n
Name : Movies
Movies added
(N)ew (S)how (Q)uit : S
(1) Animals
(2) Trees
(3) Movies
(N)ew (S)how (Q)uit : q
Bye
```

### Level 2 Add "Delete" Option

(3 points with no function, 4 points with properly used functions)

#### Example 1:

```
(N)ew (Q)uit : N
Name : Animals
Animals added
(N)ew (S)how (D)delete (Q)uit : s
(1) Animals
(N)ew (S)how (D)delete (Q)uit : n
Name : Plants
Plants added
(N)ew (S)how (D)delete (Q)uit : S
(1) Animals
(2) Plants
(N)ew (S)how (D)delete (Q)uit : N
Name : Movies
Movies added
(N)ew (S)how (D)delete (Q)uit : s
(1) Animals
(2) Plants
(3) Movies
(N)ew (S)how (D)delete (Q)uit : d
Number? : 2
(1) Animals
(2) Movies
(N)ew (S)how (D)delete (Q)uit : n
Name : Plants
Plants added
(N)ew (S)how (D)delete (Q)uit : s
(1) Animals
(2) Movies
(3) Plants
(N)ew (S)how (D)delete (Q)uit : e
Incorrect Menu
(N)ew (S)how (D)delete (Q)uit : q
Bye
```

#### Example 2:

```
(N)ew (Q)uit : s
Incorrect Menu
(N)ew (Q)uit : d
Incorrect Menu
(N)ew (Q)uit : n
Name : Dogs
Dogs added
(N)ew (S)how (D)delete (Q)uit : s
(1) Dogs
(N)ew (S)how (D)delete (Q)uit : N
Name : Cats
Cats added
(N)ew (S)how (D)delete (Q)uit : s
(1) Dogs
(2) Cats
(N)ew (S)how (D)delete (Q)uit : d
Number? : 1
(1) Cats
(N)ew (S)how (D)delete (Q)uit : d
Number? : 1
(N)ew (Q)uit : s
Incorrect Menu
(N)ew (Q)uit : q
Bye
```

### Level 3 Input data validation and crash protection

(4 points without function or 5 points with your own proper defined functions)

1. When delete, if the input data is not a number, display "Not a number"
2. When delete, if the number does not match the list deletable range, display "Not in range"

#### Example 1:

```
(N)ew (Q)uit : d
Incorrect Menu
(N)ew (Q)uit : N
Name : Dogs
Dogs added
(N)ew (S)how (D)delete (Q)uit : n
Name : Cats
Cats added
(N)ew (S)how (D)delete (Q)uit : s
(1) Dogs
(2) Cats
(N)ew (S)how (D)delete (Q)uit : d
Number? : d
Not a number
Number? : 0
Not in range
Number? : -1
Not in range
Number? : 4
Not in range
Number? : 1
(1) Cats
(N)ew (S)how (D)delete (Q)uit : d
Number? : 1
(N)ew (Q)uit : d
Incorrect Menu
(N)ew (Q)uit : s
Incorrect Menu
(N)ew (Q)uit : q
Bye
```

#### Example 2:

```
(N)ew (Q)uit : N
Name : Fish
Fish added
(N)ew (S)how (D)delete (Q)uit : n
Name : Bird
Bird added
(N)ew (S)how (D)delete (Q)uit : n
Name : Cat
Cat added
(N)ew (S)how (D)delete (Q)uit : n
Name : Dog
Dog added
(N)ew (S)how (D)delete (Q)uit : n
Name : Cow
Cow added
(N)ew (S)how (D)delete (Q)uit : s
(1) Fish
(2) Bird
(3) Cat
(4) Dog
(5) Cow
(N)ew (S)how (D)delete (Q)uit : d
Number? : 34
Not in range
Number? : t
Not a number
Number? : 2
(1) Fish
(2) Cat
(3) Dog
(4) Cow
(N)ew (S)how (D)delete (Q)uit : s
(1) Fish
(2) Cat
(3) Dog
(4) Cow
(N)ew (S)how (D)delete (Q)uit : q
Bye
```

### Level 4 (6 points)

To obtain 6 points:

1. No other functions apart from the given functions below should appear in the program.
2. The main part of the program must not exceed 15 lines.
3. No limit lines of code in the 4 given functions.

```
def new_item
#this function is to add a new item in the list

def menu_text
#this function is to manage how the menu text should be displayed to the user ((N)ew (S)how (D)delete (Q)uit)

def show_item
#this function to show data contained in the list

def delete_item
# this function is to delete an item in the list

#main part of the program should not exceed 15 lines of code
```