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COEN 278
WEB PROGRAMMIN II
ASSIGNMENT 2

1) To enclose a string:

Filename : enclose.rb, main.rb

Output : ruby main.rb

```
-----QUESTION 1) ENCLOSE DEMO START-----
Creating new enclosed string------
Enclosed array of strings are:
["<how>", "<are>", "<you>", "<doing?>"]

Setting the strings to new value:
New enclosed array of strings are:
["{i}", "{am}", "{fine}"]

Reversed array contents using object singleton method are:
["{fine}", "{am}", "{i}"]

Creating new enclosed string 2(empty list of words)------

Enclosed array of strings are:
[]

Creating new enclosed string 3 to demo exception handling------

Setting the strings to new value:
Enclosed array of strings are:
[]

Setting the strings to new value:
Exception occurred: undefined method `+' for nil:NilClass
Enclosed array of strings are:
[]
-----ENCLOSE DEMO END-----
```

2) To compress a string:

Filename : compress.rb, main.rb

Output : ruby main.rb

```
-----QUESTION 2) COMPRESS DEMO START-----
Creating new compressed string------
Object state variables are:
["i", "love", "you", "but", "do", "me"]
[0, 1, 2, 3, 4, 2, 1, 5]

Creating new compressed string with other whitespace characters------
Creating new compressed string------
Object state variables are:
["i", "love", "you", "but", "do", "me"]
[0, 1, 2, 3, 4, 2, 1, 5]

Creating new compressed string empty string------
Creating new compressed string------
Object state variables are:
[]
[]

Creating new compressed string with nil string------
Creating new compressed string------
Object state variables are:
[]
[]
-----COMPRESS DEMO END-----
```

3) To enclose and compress a string using class instance variable and methods:

Filename : enclose_class.rb, compress_class.rb, main.rb

Output : ruby main.rb

```
-----QUESTION 3a) ENCLOSE CLASS DEMO START-----
Creating new enclosed string------
Enclosed array of strings are:
["<how>", "<are>", "<you>", "<doing?>"]

Setting the strings to new value:
New enclosed array of strings are:
["{i}", "{am}", "{fine}"]

Reversed array contents are:
["{fine}", "{am}", "{i}"]

Creating new enclosed string 2(empty list of words)------

Enclosed array of strings are:
[]

Creating new enclosed string 3 to demo exception handling------

Setting the strings to new value:
Enclosed array of strings are:
["<i>", "<am>", "<fine>", "<now>"]

Setting the strings to new value:
Exception occurred: undefined method `+' for nil:NilClass
Enclosed array of strings are:
["<i>", "<am>", "<fine>", "<now>"]
-----ENCLOSE CLASS DEMO END-----

-----QUESTION 3b) COMPRESS CLASS DEMO START-----
Creating new compressed string------
Variables are:
["i", "love", "you", "but", "do", "me"]
[0, 1, 2, 3, 4, 2, 1, 5]

Creating new compressed string with other whitespace characters------
Creating new compressed string------
Variables are:
["i", "love", "you", "but", "do", "me"]
[0, 1, 2, 3, 4, 2, 1, 5]

Creating new compressed string empty string------
Creating new compressed string------
Variables are:
[]
[]

Creating new compressed string with nil string------
Creating new compressed string------
Variables are:
[]
[]
-----COMPRESS CLASS DEMO END-----
```

4) User-defined Array collect methods:

Filename : array.rb, main.rb

Output : ruby main.rb

```
-----ARRAY COLLECT DEMO START-----
Original Array collect demo
Array is:
[1, 2, 3]
Using collect to get squares of elements
Result is:
[1, 4, 9]
Original Array(Unchanged):
[1, 2, 3]

Own version of Array collect demo
Array is:
[1, 2, 3]
Using collect to get squares of elements
In own version of collect--
Result is:
[2, 5, 10]
Original Array(Unchanged):
[1, 2, 3]
Without block demo
In own version of collect--
No block given
[1, 2, 3]

Original Array collect! demo
Array is:
[1, 2, 3]
Using collect to get squares of elements
Result is:
[1, 4, 9]
Original Array(Changed):
[1, 4, 9]

Own version of Array collect! demo
Array is:
[1, 2, 3]
Using collect to get squares of elements
In own version of collect!--
Result is:
[2, 5, 10]
Original Array(Changed):
[2, 5, 10]
Without block demo
In own version of collect!--
No block given
[1, 2, 3]

-----ARRAY COLLECT DEMO END-----
```

5) Compress class with Enumerable mixin:

Filename : compress_enumerable.rb, main.rb

Output : ruby main.rb

```
-----QUESTION 5) COMPRESS ENUMERABLE DEMO START-----
Creating new compressed string------
Object state variables are:
["i", "love", "you", "but", "do", "me"]
[0, 1, 2, 3, 4, 2, 1, 5]
Demo of each function
Word is i
Word is love
Word is you
Word is but
Word is do
Word is you
Word is love
Word is me
Longest word: love
Original String re-constructed: i love you but do you love me
Reversing each word:
me love you do but you love i
Creating new compressed string 2------
Object state variables are:
["parents", "are", "the", "best"]
[0, 1, 2, 3]
Demo of each function
Word is parents
Word is are
Word is the
Word is best
Longest word: parents
Original String re-constructed: parents are the best
Reversing each word:
best the are parents
Creating new compressed string 3 empty string------
Object state variables are:
[]
[]
Demo of each function
Longest word:
Original String re-constructed:
-----COMPRESS ENUMERABLE DEMO END-----
```