Message Coder X13025_en

A message encoding of a given non-empty string *s* is a dictionary *cs* which contains, for each unique symbol in *s*, an ordered list of the positions where that symbol occurs within *s*. Implement the function @coder(s)@ such that, given the message *s*, it returns a dictionary where the keys are the unique symbols in *s*, and the values are ordered lists containing the positions at which each symbol appears in *s*.

Sample session

```
>>> d_salida = {'m': [0], 'i': [1, 14, 16], 's': [2, 3], 'a': [4, 18], 't': [5],
... 'g': [6], 'e': [7, 9], 'p': [8], 'r': [10, 19], 'c': [11, 17], 'o': [12],
... 'd': [13], 'f': [15]}
>>> if d_salida != coder("missatgepercodificar"): print(d_salida)
>>> d_salida = {'h': [0, 4, 8], 'o': [1, 5, 9], 'l': [2, 6, 10], 'a': [3, 7, 11]}
>>> if d_salida != coder("holaholahola"): print(d_salida)
>>> d_salida = {'k': [0, 1, 2]}
>>> if d_salida != coder("kkk"): print(d_salida)
>>> d_salida = {'a': [0, 2, 4, 10, 13, 15, 19], 'x': [1, 6, 9, 16], 's': [3], 'z': [5],
... 'i': [7], 'n': [8, 11], 'c': [12, 14], 't': [17], 'l': [18]}
>>> if d_salida != coder("axasazxinxancacaxtla"): print(d_salida)
>>> d_salida = {'f': [0], 'e': [1, 18], 'l': [2], 'i': [3, 8], 'z': [4], 'n': [5 ],
... 'a': [6, 10], 'v': [7], 'd': [9, 11], 'y': [12], 'p': [13, 17], 'r': [14, 19],
... 'o': [15, 20], 's': [16], '2': [21], '0': [22], '1': [23], '8': [24]}
>>> if d_salida != coder("feliznavidadyprospero2018"): print(d_salida)
```

Problem information

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Generation: 2026-01-25T13:39:46.325Z