```
1 """
 2 This module is in charge of the user interface, i.e. it
   shows the right text in the chosen language.
 3 """
 4
 5 import screen constants
 6
7
8 def show start ask language():
9
10
       asks the language the user wants to use at the
   beginning: french or english
11
       ' f ' for french
12
       ' e ' for english
13
       :return: char
14
15
       return input(screen constants.START ASK LANGUAGE)
16
17
18 def show language settings():
19
20
       asks the language the user wants to use in the program
    : french or english
       ' f ' for french
21
22
       ' e ' for english
23
       :return: char
       11 11 11
24
25
       return input (screen constants.LANGUAGE SETTINGS)
26
27
28 def show main menu(english):
       11 11 11
29
30
       asks the user if he wants to use the fonction
   encryption or decryption of the program
31
       'c' for encryption
32
       'd' for decryption
33
       's' for going to language settings
       'q' to quit the program
34
35
       :param english: boolean
36
        True if chosen language is english
37
       False if chosen language is french
38
       :return: char
       11 11 11
39
40
       # language chosen is english
41
       if english:
```

```
42
           return input(screen constants.ENGLISH MAIN MENU)
43
       # language chosen is french
44
       elif english is False:
45
           return input(screen constants.FRENCH MAIN MENU)
46
       else:
47
           return "this should never happen"
48
49
50 def show principles (english, encrypting):
51
52
       asks what type of method the user wants to use to
   encrypt or decrypt his text
53
       'c' for Caesar's cypher
54
       'v' for Vigenere's cypher
       'e' for the Enigma machine
55
56
       'm' to go back to the main menu
57
       :param english: boolean
58
       True if chosen language is english
59
       False if chosen language is french
60
       :param encrypting: boolean
61
       True if the user wants to encrypt his text
62
       False if he wants to decrypt his text
63
       :return: char
       11 11 11
64
65
       # language chosen is english
66
       if english:
67
           if encrypting:
68
               return input (screen constants.
   ENGLISH PRINCIPLES ENCRYPTING)
69
           if encrypting is False:
70
               return input (screen constants.
   ENGLISH PRINCIPLES DECRYPTING)
71
       # language chosen is french
72
       elif english is False:
73
           if encrypting:
74
               return input (screen constants.
   ENGLISH PRINCIPLES ENCRYPTING)
75
           if encrypting is False:
76
               return input (screen constants.
   ENGLISH PRINCIPLES DECRYPTING)
77
       else:
78
           return "this should never happen"
79
80
81 def show ask key(english, principle):
```

```
11 11 11
 82
 83
        asks the key the user wants to use for the method his
     has chosen
        key = char
 84
        ' m ' to go back to the main menu
 85
 86
        :param principle:
 87
        :param english: boolean
         True if chosen language is english
 88
         False if chosen language is french
 89
 90
        :return: char
 91
 92
        # language chosen is english
 93
        if english:
            if principle == 'c':
 94
 95
                 return input (screen constants.
    ENGLISH ASK KEY CAESAR)
 96
            elif principle == 'v':
 97
                 return input (screen constants.
    ENGLISH ASK KEY VIGENERE)
 98
            elif principle == 'e':
                return input (screen constants.
 99
    ENGLISH ASK KEY ENIGMA)
100
            else:
101
                return "this should never happen"
        # language chosen is french
102
        elif english is False:
103
104
            if principle == 'c':
105
                 return input (screen constants.
    FRENCH ASK KEY CAESAR)
106
            elif principle == 'v':
107
                 return input (screen constants.
    FRENCH ASK KEY VIGENERE)
            elif principle == 'e':
108
109
                return input (screen constants.
    FRENCH ASK KEY ENIGMA)
110
            else:
111
                return "this should never happen"
112
113
114 def show ask text(english):
115
        11 11 11
116
        asks the text that the user wants to decrypt/encrypt
117
        ' m ' to go back to the main menu
        :param english: boolean
118
119
         True if chosen language is english
```

```
120
         False if chosen language is french
121
        :return: char
122
123
        # language chosen is english
124
       if english:
125
            return input(screen constants.ENGLISH ASK TEXT)
126
        # language chosen is french
127
        elif english is False:
128
            return input (screen constants.FRENCH ASK TEXT)
129
        else:
130
            return "this should never happen"
131
132
133 def show treated text(english, encrypting, text):
        11 11 11
134
135
        shows the decrypted/encrypted text
136
        :param text: string
137
       the user's en-/decrypted text
       :param english: boolean
138
139
        True if chosen language is english
        False if chosen language is french
140
141
       :param encrypting: boolean
142
        True if the user wants to encrypt his text
143
        False if he wants to decrypt his text
144
       :return: char
145
146
       # language chosen is english
       if english:
147
148
            if encrypting:
                print(screen constants.ENGLISH ENCRYPTED TEXT
149
     + "\n" + text) # print encrypted text
150
            elif encrypting is False:
                print(screen constants.ENGLISH DECRYPTED TEXT
151
     + "\n" + text) # print decrypted text
            # tell user what to do in order to continue
152
            return input(screen constants.ENGLISH CONTINUE)
153
        # language chosen is french
154
155
       if english is False:
156
            if encrypting:
157
                print(screen constants.FRENCH ENCRYPTED TEXT
    + "\n" + text) # print encrypted text
            elif encrypting is False:
158
159
                print(screen constants.FRENCH DECRYPTED TEXT
   + "\n" + text) # print decrypted text
            # tell user what to do in order to continue
160
```

```
161
            return input(screen constants.FRENCH CONTINUE)
162
        else:
163
            return "this should never happen"
164
165
166 def show help principles (english):
167
168
        shows the help screen which give explanations on the
    different encryption methods
169
        :param english: boolean
170
         True if chosen language is english
171
         False if chosen language is french
172
        :return: char
        11 11 11
173
174
        # language chosen is english
175
        if english:
176
            input(screen constants.ENGLISH HELP PRINCIPLES)
177
        # language chosen is french
        elif english is False:
178
179
            input(screen constants.FRENCH HELP PRINCIPLES)
180
        else:
            return "this should never happen"
181
182
183
184 def show quit message(english):
185
186
        shows the exit message of the program
187
        :param english: boolean
188
        True if chosen language is english
189
         False if chosen language is french
190
        :return: char
        11 11 11
191
192
        # language chosen is english
193
        if english:
194
            print(screen constants.ENGLISH QUIT MESSAGE)
195
        # language chosen is french
        elif english is False:
196
197
            print(screen constants.FRENCH QUIT MESSAGE)
198
        else:
199
            return "this should never happen"
200
```