

```
1  #\input texinfo
2
3  """ Generic Python Character Mapping Codec.
4
5      Use this codec directly rather than through the automatic
6      conversion mechanisms supplied by unicode() and .encode().
7
8
9  Written by Marc-Andre Lemburg (mal@lemburg.com).
10
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12
13  """>#"
14
15  import codecs
16
17  ### Codec APIs
18
19  class Codec(codecs.Codec):
20
21      # Note: Binding these as C functions will result in the class not
22      # converting them to methods. This is intended.
23      encode = codecs.charmap_encode
24      decode = codecs.charmap_decode
25
26  class IncrementalEncoder(codecs.IncrementalEncoder):
27      def __init__(self, errors='strict', mapping=None):
28          codecs.IncrementalEncoder.__init__(self, errors)
29          self.mapping = mapping
30
31      def encode(self, input, final=False):
32          return codecs.charmap_encode(input, self.errors, self.mapping)[0]
33
34  class IncrementalDecoder(codecs.IncrementalDecoder):
35      def __init__(self, errors='strict', mapping=None):
36          codecs.IncrementalDecoder.__init__(self, errors)
37          self.mapping = mapping
38
39      def decode(self, input, final=False):
40          return codecs.charmap_decode(input, self.errors, self.mapping)[0]
41
42  class StreamWriter(Codec, codecs.StreamWriter):
43
44      def __init__(self, stream, errors='strict', mapping=None):
45          codecs.StreamWriter.__init__(self, stream, errors)
46          self.mapping = mapping
47
48      def encode(self, input, errors='strict'):
49          return Codec.encode(input, errors, self.mapping)
50
51  class StreamReader(Codec, codecs.StreamReader):
```

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52
53     def __init__(self, stream, errors='strict', mapping=None):
54         codecs.StreamReader.__init__(self, stream, errors)
55         self.mapping = mapping
56
57     def decode(self, input, errors='strict'):
58         return Codec.decode(input, errors, self.mapping)
59
60     ### encodings module API
61
62     def getregentry():
63         return codecs.CodecInfo(
64             name='charmap',
65             encode=Codec.encode,
66             decode=Codec.decode,
67             incrementalencoder=IncrementalEncoder,
68             incrementaldecoder=IncrementalDecoder,
69             streamwriter=StreamWriter,
70             streamreader=StreamReader,
71         )
72
```