



# Enum parser

This notebook shows how to use an Enum output parser

```
from langchain.output_parsers.enum import EnumOutputParser
```

## API Reference:

- `EnumOutputParser` from `langchain.output_parsers.enum`

```
from enum import Enum
```



```
class Colors(Enum):  
    RED = "red"  
    GREEN = "green"  
    BLUE = "blue"
```

```
parser = EnumOutputParser(enum=Colors)
```

```
parser.parse("red")
```

```
<Colors.RED: 'red'>
```

```
# Can handle spaces  
parser.parse(" green")
```

```
<Colors.GREEN: 'green'>
```

```
# And new lines
parser.parse("blue\n")
```

```
<Colors.BLUE: 'blue'>
```

```
# And raises errors when appropriate
parser.parse("yellow")
```

```
-----
-----
ValueError                                Traceback (most recent call
last)
```

```
File ~/workplace/langchain/langchain/output_parsers/enum.py:25, in
EnumOutputParser.parse(self, response)
```

```
    24 try:
--> 25     return self.enum(response.strip())
    26 except ValueError:
```

```
File ~/.pyenv/versions/3.9.1/lib/python3.9/enum.py:315, in
EnumMeta.__call__(cls, value, names, module, qualname, type, start)
    314 if names is None: # simple value lookup
--> 315     return cls.__new__(cls, value)
    316 # otherwise, functional API: we're creating a new Enum type
```

```
File ~/.pyenv/versions/3.9.1/lib/python3.9/enum.py:611, in
Enum.__new__(cls, value)
```

```
    610 if result is None and exc is None:
--> 611     raise ve_exc
    612 elif exc is None:
```

```
ValueError: 'yellow' is not a valid Colors
```

During handling of the above exception, another exception occurred:

OutputParserException  
last)

Traceback (most recent call

Cell In[8], line 2

```
1 # And raises errors when appropriate
----> 2 parser.parse("yellow")
```

File ~/workplace/langchain/langchain/output\_parsers/enum.py:27, in EnumOutputParser.parse(self, response)

```
25     return self.enum(response.strip())
26 except ValueError:
---> 27     raise OutputParserException(
28         f"Response '{response}' is not one of the "
29         f"expected values: {self._valid_values}"
30     )
```

OutputParserException: Response 'yellow' is not one of the expected values: ['red', 'green', 'blue']