

```
import json
```

```
class Patient:
```

```
    def __init__(self, cpf, name, address, telephone, email):
        self.cpf = cpf
        self.name = name
        self.address = address
        self.telephone = telephone
        self.email = email
```

```
@classmethod
```

```
def from_input(cls):
    return cls(
        input('CPF: '),
        input('NAME: '),
        input('Address: '),
        input('Telephone: '),
        input('Email: ')
    )
```

```
class VertebralColumnReport:
```

```
    def __init__(self, patient, report):
        self.id = patient
        self.pelvic_incidence = report['pelvic_incidence']
        self.pelvic_tilt = report['pelvic_tilt']
        self.lumbar_lordosis_angle = report['lumbar_lordosis_angle']
        self.sacral_slope = report['sacral_slope']
        self.pelvic_radius = report['pelvic_radius']
        self.grade_of_spondylolisthesis = report['grade_of_spondylolisthesis']
```

```
    def tolist(self):
        return [self.pelvic_incidence,
                self.pelvic_tilt,
                self.lumbar_lordosis_angle,
                self.sacral_slope,
                self.pelvic_radius,
                self.grade_of_spondylolisthesis]
```

```
    def todict(self):
        return {
            'pelvic_incidence' : self.pelvic_incidence,
            'pelvic_tilt' : self.pelvic_tilt,
            'lumbar_lordosis_angle' : self.lumbar_lordosis_angle,
            'sacral_slope' : self.sacral_slope,
            'pelvic_radius' : self.pelvic_radius,
            'grade_of_spondylolisthesis' : self.grade_of_spondylolisthesis
        }
```