

P3. Explain De Morgan's Law using a simple and relatable example by creating a rule using any of the provided variables.

As per the De Morgan's law "**not (A and B)**" is equivalent to "**(not A) or (not B)**"

And also,

"**not (A or B)**" is equivalent to "**not(A) and not(B)**"

For this problem let's assume a simple rule:

For all participants, below the age of 18 and age above 80 receive "Decline" and rest other receive "Review"

Code snippet to check this condition in python:

```
if( age<18 and age>80):  
    return "Decline"  
else: return "Review"
```

Mathematical expression would be:

(age<18 && age>80)

And as per the De Morgan's law the equivalent expression will be:

!(age<18 && age>80)
= age>=18 || age<=80