Model-based Decision Support

| Exam 6 (homework) | Enrolment number: | May, 2014 |
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The Management of the chain of stores Doberhams has taken the following 3 Outputs and 2 Inputs as crucial for efficiency measuring of their branches:

(O) Sales (unit sold articles)(O) Total Revenue (unit £)(O) Profits (unit £)

(I) Employees (full time equivalent)(I) Sales Area (unit 100 m²)

Data collection yields the following operating figures:

| Store | (I) Employee | (I) Area | (O) Sales | (O) Revenue | (O) Profits |
|-------------|--------------|----------|-----------|-------------|-------------|
| Doberhams A | 1X | 20 | 700 | 6000 | 700 |
| Doberhams B | 1Y | 15 | 1000 | 12000 | 1700 |
| Doberhams C | 20 | 30 | 800 | 11000 | 1900 |
| Doberhams D | 25 | 15 | 1200 | 23000 | 2600 |
| Doberhams E | 1Z | 9 | 900 | 18000 | 4000 |
| Doberhams F | 16 | 24 | 1200 | 12000 | 3200 |
| Doberhams G | 13 | 32 | 1400 | 14000 | 3100 |

For X use the last digit of your student enrolment number, Y the last but one digit, and Z the last but two.

Use MS Excel and DEA to compute CCR-efficiency of these branches of Doberhams (inputoriented). For one of the necessary seven optimization runs, copy your spreadsheet to a piece of paper. Additionally, describe verbally which branch operates efficiently and which not. Your submission should be handed in at the next class on May 22nd.

(In case that you don't have access to MS Excel contact me, and I provide you a working place at our computer lab).