**PHÂN TÍCH DỮ LIỆU LỚN**

**HỌ TÊN: TRẦN TẤN PHÁT**

**MSSV: 2274802010644**

**ĐỀ BÀI: NEO4J**

**BÀI LÀM**

1. **Tạo dữ liệu mẫu (20 điểm)**

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1. **Tìm phim và người (20 điểm)**

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1. **Tìm bạn diễn và phim (30 điểm)**

**3.1 Tìm người diễn chung với Tom Hanks trong phim ngân sách trên 50 triệu USD, có "WORKED\_WITH" ít nhất 2 dự án. Trả về name, title, role, budget, projects, sắp xếp theo budget giảm dần.**

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**3.2 Tìm người diễn trong phim Sci-Fi ngân sách trên 100 triệu USD, hợp tác với Leonardo DiCaprio ít nhất 1 dự án. Trả về name, title, budget.**

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**3.3 Đếm số phim Romance ngân sách trên 150 triệu USD mà Kate Winslet tham gia. Trả về số lượng**

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1. **Đường đi và phân tích (30 điểm)**
   1. **Tìm đường ngắn nhất từ Tom Hanks đến James Cameron qua "ACTED\_IN", "DIRECTED", "WORKED\_WITH". Tính tổng salary của Tom Hanks từ 3 phim ngân sách cao nhất, kiểm tra phim nào trong số đó nằm trên đường đi. Trả về path, totalSalary, titles, budgets.**

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* 1. **Tìm đường ngắn nhất từ Steven Spielberg đến Natalie Portman qua các quan hệ trên. Tính tổng salary của Natalie Portman từ 2 phim lương cao nhất, kiểm tra thể loại của chúng. Trả về path, totalSalary, titles, types.**

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**A diagram of a movie

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* 1. **Đếm số người có "WORKED\_WITH" với ít nhất 3 người khác trong hình. Trả về số lượng.**

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