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Class: SE1707

Subject: DBI202

Product (maker, model, type)

PC (model, speed, ram, hd, price)

Laptop (model, speed, ram, hd, screen, price)

Printer (model, color, type, price)

**a) What PC models have a speed of at least 3.00?**

**πmodel(σspeed≥3.00 (PC))**

**πmodel**

**σspeed≥3.00**

**PC**

**b) Which manufacturers make laptops with a hard disk of at least 100GB?**

**πmaker(Product⋈σhd≥100GB (Laptop))**

**πmaker**

**⋈**

**Product σhd≥100GB**

**Laptop**

**c) Find the model number and price of all products (of any type) made by manufacturer B.**

**πmodel,price(σmaker=B (Product)⋈((PC)∪(Laptop)∪(Printer))**

**πmodel,price**

**⋈**

**σmaker=B ∪**

**Product PC Laptop Printer**

**d) Find the model numbers of all color laser printers.**

**πmodel(σcolor=true(Printer)∩ (σtype=laser(Printer))**

**πmodel**

**∩**

**σcolor=true σtype=laser**

**Printer Printer**

**e) Find those manufacturers that sell Laptops, but not PC's.**

**πmaker(σtype=Laptop(Product)) \ πmaker(σtype=PC(Product))**

**\**

**πmaker πmaker**

**σtype=Laptop σtype=PC**

**Product Product**