

Final Project SBD

Aljabar Relasional

Muhammad Rafi Sutrisno / 5025211167

1.

$\text{Detail_TR}(\text{bulan}, \text{G_ID}) \leftarrow \pi_{\text{extract}(\text{month from TR_TGLBELI}), \text{Game_G_ID}} (\text{Transaksi} \bowtie \text{Detail_Transaksi_Game})$

$\text{HASIL} \leftarrow \pi_{\text{bulan}, \text{count}(*)} (\tau_{\text{bulan}} (\forall \text{bulan} (\sigma_{\text{G_ID}=\text{Game_G_ID}} (\text{Game} \times \text{Detail_TR}))))$

2.

$\text{Dev_BI} \leftarrow \pi_{\text{D_ID}, \text{D_Nama}, \text{BI_Nama}} (\sigma_{\text{D_ID}=\text{Developer_D_ID} \text{ and } \text{G_ID}=\text{Game_G_ID} \text{ and } \text{BI_ID}=\text{bahasa_interface_BI_ID}} (\text{Developer} \times \text{game} \times \text{Detail_Game_BI} \times \text{Bahasa_Interface}))$

$\text{HASIL}(\text{D_ID}, \text{D_NAMA}, \text{jumlah_bahasa}) \leftarrow \pi_{\text{D_ID}, \text{D_NAMA}, \text{count}(*)} (\text{Having count}(>1) (\forall \text{D_ID} (\text{Dev_BI})))$

3.

$\text{Max}(\text{harga_tertinggi}) \leftarrow \pi_{\text{max}(\text{BU_HARGA})} (\text{bundle} \bowtie \text{Detail_Transaksi_bundle})$

$\text{HASIL} \leftarrow \pi_{\text{U_ID}, \text{U_NAMA}, \text{BU_NAMA}} (\sigma_{\text{TR_ID}=\text{Transaksi_TR_ID} \text{ and } \text{BU_ID}=\text{Bundle_BU_ID} \text{ and } \text{U_ID}=\text{User_U_ID} \text{ and } \text{BU_HARGA} = \text{Max}} (\text{user} \times \text{transaksi} \times \text{Detail_Transaksi_bundle} \times \text{bundle}))$

4.

$\text{G_tahunRilis}(\text{tahun}, \text{G_ID}) \leftarrow \pi_{\text{extract}(\text{year from G_TGLRILIS}), \text{G_ID}} (\text{Game})$

$\text{HASIL}(\text{tahun}, \text{jumlah_game_dirilis}) \leftarrow \pi_{\text{tahun}, \text{count}(*)} (\tau_{\text{tahun DESC}} (\forall \text{tahun} (\text{G_tahunRilis})))$

5.

$\text{Tags_game} \leftarrow \pi_{\text{T_ID}, \text{T_Nama}, \text{G_HARGA}} (\sigma_{\text{T_ID}=\text{Tags_T_ID} \text{ and } \text{G_ID}=\text{Game_G_ID}} (\text{tags} \times \text{game} \times \text{Detail_Game_tags}))$

$\text{HASIL}(\text{T_ID}, \text{T_NAMA}, \text{Rata2_HargaGame}) \leftarrow \pi_{\text{T_ID}, \text{T_NAMA}, \text{round}(\text{AVG}(\text{G_HARGA}, 2))} (\forall \text{T_ID} (\text{Tags_game}))$