

ACTIVITY PERTEMUAN 1

NAMA : Ajay Alfredo Almani
NPM : 50420093
KELAS : 2IA16
TANGGAL : 14 Oktober 2021
MATERI : Sistem Bilangan
PERTEMUAN : ke - 1
MATA PRAKTIKUM : Organisasi Sistem Komputer



SOAL ACTIVITY

- | | | |
|-----------------------|---|-----------|
| 1. 1234 (Oktal) | = | (Desimal) |
| 2. 2CDA (Hexadesimal) | = | (Desimal) |
| 3. 111011 (Biner) | = | (Desimal) |
| 4. 356 (Oktal) | = | (Desimal) |
| 5. 7A1 (Hexadesimal) | = | (Desimal) |

Jawab

1. 1234 (Oktal)

$$\begin{aligned} &= (1 \times 8^3) + (2 \times 8^2) + (3 \times 8^1) + (4 \times 8^0) \\ &= 512 + 128 + 24 + 4 \\ &= 668_{10} \text{ Desimal} \end{aligned}$$

2. 2CDA (Hexadesimal)

$$\begin{aligned} &= (2 \times 16^3) + (12 \times 16^2) + (13 \times 16^1) + (10 \times 16^0) \\ &= 8.192 + 3.072 + 208 + 10 = 11.482_{10} \text{ Desimal} \end{aligned}$$

3. 111011 (Biner)

$$\begin{aligned} &= (1 \times 2^5) + (1 \times 2^4) + (1 \times 2^3) + (0 \times 2^2) + (1 \times 2^1) + (1 \times 2^0) \\ &= 32 + 16 + 8 + 0 + 2 + 1 = 59_{10} \end{aligned}$$

4. 356 (Oktal)

$$\begin{aligned} &= (3 \times 8^2) + (5 \times 8^1) + (6 \times 8^0) \\ &= 192 + 40 + 6 = 238_{10} \end{aligned}$$

5. 7A1 (Hexadesimal)

$$\begin{aligned} &= (7 \times 16^2) + (10 \times 16^1) + (1 \times 16^0) \\ &= 1.792 + 160 + 1 = 1.953_{10} \end{aligned}$$