

# **Sistem Operasi Praktik – V Responsi**

Dosen : Iwan Hartadi Tri Untoro, S.T., M.Kom.

Asdos : Galang Aidil Akbar



**Disusun Oleh :**

5200411186 – Rifqi Helmi Fadhil

**Program Studi Informatika  
Fakultas Saints & Teknologi  
Universitas Teknologi Yogyakarta  
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# 1. Manajemen RAM

Source Code :

```
print("=====  
Program PetaBit =====")  
ram = float(input("\nKapasitas RAM (GB) : "))  
blok = float(input("Jumlah PetaBit : "))  
os = float(input("Kapasitas OS (GB) : "))  
prgm1 = float(input("Kapasitas Program 1 (MB) : "))  
prgm2 = float(input("Kapasitas Program 2 (MB) : "))  
  
# Konvert GB to MB  
ramv = ram * 1024  
osv = os * 1024  
  
# Kapasitas per blok  
kbit = ramv / blok  
  
# Pengelolaan RAM  
prgm = prgm1 + prgm2  
pake = osv + prgm  
tpake = ramv - pake  
  
# Pengelolaan PetaBit  
blok1 = pake / kbit  
blok0 = blok - blok1  
  
print("\n=====  
Hasil Perhitungan =====")  
print("\nTotal RAM :",ram,"GB")  
print("Total OS : ",os,"GB")  
print("Kapasitas per Blok :",kbit,"MB")  
print("Total RAM Terpakai :",pake,"MB")  
print("Total RAM Tidak Terpakai :",tpake,"MB")  
print("Blok Bernilai 1 :",blok1)  
print("Blok Bernilai 0 :",blok0)
```

Hasil Running :

```
=====  
Program PetaBit =====  
  
Kapasitas RAM (GB) : 8  
Jumlah PetaBit : 32  
Kapasitas OS (GB) : 1  
Kapasitas Program 1 (MB) : 2300  
Kapasitas Program 2 (MB) : 1600  
  
===== Hasil Perhitungan =====  
  
Total RAM : 8.0 GB  
Total OS : 1.0 GB  
Kapasitas per Blok : 256.0 MB  
Total RAM Terpakai : 4924.0 MB  
Total RAM Tidak Terpakai : 3268.0 MB  
Blok Bernilai 1 : 19.234375  
Blok Bernilai 0 : 12.765625
```

## 2. Round Robin

Source Code :

```
prgm = {}

print("===== Program Round Robin =====")
jmlh = int(input("Jumlah Program : "))

def create(programKey, programValue):
    prgm[programKey] = programValue
    print("Program Berhasil Dimasukkan!")

x = 1
while x <= jmlh :
    programKey = str(input("\nNama Program :"))
    programValue = int(input("Brush Time :"))
    create(programKey, programValue)
    x += 1

quantum = int(input("\nQuantum Time : "))

def sort():
    return sorted(prgm.items(), key=lambda item: item[1], reverse=False)

def move(programKey, programValue):
    prgm[programKey] = programValue

print("\n===== Hasil Running =====")
prog = sort()
for key, value in prog:
    print("Nama Program : {}\tBrush Time: {}".format(key,value))
```

Hasil Running :

```
===== Program Round Robin =====
Jumlah Program : 4

Nama Program : Valorant
Brush Time : 24
Program Berhasil Dimasukkan!

Nama Program : Word
Brush Time : 12
Program Berhasil Dimasukkan!

Nama Program : Excel
Brush Time : 8
Program Berhasil Dimasukkan!

Nama Program : Call of Duty
Brush Time : 24
Program Berhasil Dimasukkan!

Quantum Time : 4

===== Hasil Running =====
Nama Program : Excel      Brush Time: 8
Nama Program : Word      Brush Time: 12
Nama Program : Valorant   Brush Time: 24
Nama Program : Call of Duty Brush Time: 24
```