

RESPONSI



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SISTEM OPERASI PRAKTIK
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1. Manajemen RAM

Source code

```
# Raka Rahmat Hidayat 5200411529

print("-" * 50)
print("\t\tRESPONSI SO PRAKTIK")
print("-" * 50)

ram = int(input("Kapasitas RAM: "))
blok = int(input("Blok/unit: "))
so = int(input("Sistem Operasi: "))
dipakai = int(input("yang dipakai: "))

mbps = ram * 1024
petabit = ram / blok

terpakai = ram + (so - dipakai)
sisasisa = ram - (so + dipakai)
blookterpakai = petabit / mbps

print("Petabit",petabit)
print("Terpakai",terpakai)
print("Tersisa",sisasisa)
print("total blok", blok)
print("Blok terpakai", blookterpakai )
print("Jumlah blok bernilai 1 = ", blok)
print("Jumlah blok bernilai 0 = ", blok - blookterpakai)
```

hasil run program

```
-----  
                        RESPONSI SO PRAKTIK  
-----  
Kapasitas RAM: 8  
Blok/unit: 4  
Sistem Operasi: 3  
yang dipakai: 2  
Petabit 2.0  
Terpakai 9  
Tersisa 3  
total blok 4  
Blok terpakai 0.000244140625  
Jumlah blok bernilai 1 = 4  
Jumlah blok bernilai 0 = 3.999755859375  
PS C:\Users\ASUS> |
```

2. Round Robin

Source code

```
# Raka Rahmat Hidayat 5200411529  
  
def findWaitingTime(processes, n, bt,  
                    wt, quantum):  
    rem_bt = [0] * n  
  
    for i in range(n):  
        rem_bt[i] = bt[i]  
    t = 0  
  
    while(1):  
        done = True  
  
        for i in range(n):  
  
            if (rem_bt[i] > 0) :  
                done = False  
  
                if (rem_bt[i] > quantum) :  
  
                    t += quantum  
  
                    rem_bt[i] -= quantum  
  
            else:  
  
                t = t + rem_bt[i]  
  
                wt[i] = t - bt[i]
```

```

        rem_bt[i] = 0

    if (done == True):
        break

def findTurnAroundTime(processes, n, bt, wt, tat):

    for i in range(n):
        tat[i] = bt[i] + wt[i]

def findavgTime(processes, n, bt, quantum):
    wt = [0] * n
    tat = [0] * n

    findWaitingTime(processes, n, bt,
                    wt, quantum)

    findTurnAroundTime(processes, n, bt,
                      wt, tat)

    print("Proses\t\tWaktu Pengerjaan\t\tWaktu ",
          "Proses\t\tTurn Around Time")

    total_wt = 0
    total_tat = 0
    for i in range(n):

        total_wt = total_wt + wt[i]
        total_tat = total_tat + tat[i]
        print(" ", i + 1, "\t\t", bt[i],
              "\t\t", wt[i], "\t\t", tat[i])

    print("\nRata rata waktu proses = %.5f"%(total_wt / n) )
    print("Rata rata turn around time = %.5f"%(total_tat / n))

if __name__ == "__main__":

    proc = [1, 2, 3]
    n = 3

    burst_time = [10, 5, 8]

    quantum = 2;
    findavgTime(proc, n, burst_time, quantum)

```

Hasil Run Program

```
PS C:\Users\ASUS> & C:/Users/ASUS/AppData/Local/Programs/Python/Python39/python.exe d:/DATA/Downloads/responsi.py
Proses    Waktu Pengerjaan    Waktu    Proses    Turn Around Time
1         10             13        23
2         5              10        15
3         8              13        21

Rata rata waktu proses = 12.00000
Rata rata turn around time = 19.66667
PS C:\Users\ASUS>
```