TUGAS 4

Nama : Fani Aulias Furqan

NIM: 211001124

AI

```python
#Nomor 1
list1=[]
list2=[]
print(50*"-")
jmlh=0
for i in range(5):
    nama=input("Masukkan Nama : ")
    x=int(input("Masukkan Nilai : "))
    print(50*"-")
    jmlh=jmlh+x
    list1.append(nama)
    list2.append(x)

print(50*"-")
print(f"No\tNam\t\tNilai")
print(50*"-")
for i in range(5):
    print(f"{i+1}\t{list1[i]}\t\t{list2[i]}")
print(50*"-")
print("Jumlah Mahasiswa = ", len(list1))
print("Rata-rata =", jmlh/len(list1))
```

```python
#Nomor 2
list1=[]
list2=[]
list3=[]
print(50*"-")
jmlh=0
lulus=0
galulus=0
for i in range (5):
    nama=input("Masukkan Nama : ")
    x=int(input("Masukkan Nilai : "))
    if x >= 60:
        grade="Lulus"
        lulus=lulus+1
    else :
        grade="Tidak Lulus"
        galulus=galulus+1
    print(50*"-")
    jmlh=jmlh+x
    list1.append(nama)
    list2.append(x)
    list3.append(grade)

print(50*"-")
print(f"No\tNama\t\tNilai\tKeterangan")
print(50*"-")
for i in range(5):
    print(f"{i+1}\t{list1[i]}\t\t{list2[i]}\t{list3[i]}")
```

```python
#nomor 3
list1=[]
list2=[]
list3=[]
list4=[]
list5=[]
list6=[]
jmlh1=0
jmlh2=0
jmlh3=0
jmlh4=0

print(50*"-")

jumlah=int(input("Jumlah Mahasiswa : "))
for i in range(jumlah):
    nama=input("Nama Masiswa :")
    tugas=int(input("Masukkan Nilai Tugas : "))
    uts=int(input("Masukkan Nilai UTS : "))
    uas=int(input("Masukkan Nilai UAS : "))
    na=(30/100*tugas) + (30/100*uts) + (40/100*uas)
    jmlh1=jmlh1+tugas
    jmlh2=jmlh2+uts
    jmlh3=jmlh3+uas
    jmlh4=jmlh4+na
    list2.append(nama)
    list3.append(tugas)
    list4.append(uts)
    list5.append(uas)
    list6.append(na)

print("Nilai Akhir :"+str(na))
```

```python
85    print(50*"-")
86    list1.append(jumlah)
87    list2.append(nama)
88    list3.append(tugas)
89    list4.append(uts)
90    list5.append(uas)
91    list6.append(na)
92
93    print(f"No\tNama\tTugas\tUTS\tUAS\tNilai Akhir")
94    print(50*"-")
95    for i in range(2):
96        print(f"{i+1}\t{list1[i]}\t{list3[i]}\t{list4[i]}\t{list5[i]}\t{list6[i]}")
97
98    print(50*"-")
99    print("Rata-rata Tugas =", jmlh1/len(list3))
00    print("Rata-rata UTS = ",jmlh2/len(list4))
01    print("Rata-rata UAS =",jmlh3/len(list5))
02    print("Rata-rata Nilai = ",jmlh4/len(list6))
03
04    #nomor 4
05
06    pilihane=int(input("Masukkan Pilihan Anda : 1. Ganjil | 2. Genap"))
07    awale=int(input("Masukkan Nilai Awal : "))
08    akhire=int(input("Masukkan Nilai Akhir : "))
09
10    if pilihane==1:
11        for x in range(awale,akhire):
12            if x % 2==1:
13                print(x)
```

```python
115    #nomor 5
116
117    list=[]
118    nilai=int(input("Berapa Banyak Data : "))
119
120    for i in range (nilai):
121        x=int(input("Masukkan Nilainya : "))
122        list.append(x)
123
124    m=max(list)
125    print("Nilai Maximal Adalah :"+str(m))
```

```python
127    #nomor 6.a
128    list=[]
129    banyak=int(input("Masukkan Berapa Banyak Data : "))
130
131    for i in range (banyak):
132        x=int(input("Masukkan Nilainya : "))
133        if x%2==0:
134            list.append(x)
135
136    print(list)
```

```python
138    #nomor 6.b
139    list=[]
140    banyak=int(input("Masukkan Berapa Banyak Data : "))
141
142    for i in range (banyak):
143        x=int(input("Masukkan Nilainya : "))
144        if x>0:
145            list.append(x)
146
147    print(list)
```

```python
149    #nomor 6.c
150    list=[]
151    banyak=int(input("Masukkan Berapa Banyak Data : "))
152
153    for i in range (banyak):
154        x=int(input("Masukkan Nilainya : "))
155        if x%3==0 and x %2==1:
156            list.append(x)
157
158    print(list)
159    #nomor 6.d
160
161    list=[]
162    banyak=int(input("Masukkan Berapa Banyak Data : "))
163
164    for i in range (banyak):
165        x=int(input("Masukkan Nilainya : "))
166        if x%3!=0:
167            list.append(x)
168
169    print(list)
```

```python
171    #nomor 7
172
173    list=[]
174    banyak=int(input("Masukkan Berapa Banyak Data : "))
175
176 ∨ for i in range (banyak):
177        x=int(input("Masukkan Nilainya : "))
178 ∨     if x%5==0:
179            list.append(x)
180
181    print(list)
182
183    #Nomor 8
184    import numpy as np
185
186    u=np.array([1,2,3])
187    v=np.array([4,5,6])
188    print("Vektor u=",u)
189    print("Vektor v=",v)
190    print("Penjumlahan vektor : u+v =",u+v)
191    print("Perkalian Hadamrd Vektor : u*v = ",u*v)
192
193    #nomor 10
194    list1=[]
195    list2=[]
196
197    banyak=int(input("Masukkan Banyak Data : "))
198 ∨ for i in range(banyak):
199        x=int(input("Masukkan Nilai: "))
200 ∨     if x>0:
201            list1.append(x)
202 ∨     else:
203            list2.append(x)
204
205 ∨ if len(list1) > len(list2):
206        print("Bilangan Positif Lebih Banyak")
207 ∨ else:
208        print("Bilangan Negatif Lebih Banyak")
```