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Kelas : SI-46-06

No.1

soal1.py

Soal Assesmen > soal1.py > ...

```python
def hitung_rating(rating):
    terendah = min(rating)
    tertinggi = max(rating)
    average = sum(rating) / len(rating)
    return [terendah, tertinggi, average]

input1 = [4.5, 2.0, 1.5, 3.0, 2.5, 4.0, 5.0, 3.5, 2.0, 1.0]
output1 = hitung_rating(input1)
print(output1)

input2 = [5.0, 4.0, 2.5, 5.0, 3.6, 1.1, 3.6, 4.0, 4.2, 1.5]
output2 = hitung_rating(input2)
print(output2)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python
esmen\soal1.py"
[1.0, 5.0, 2.9]
[1.1, 5.0, 3.4500000000000006]
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG>
```

No.2

soal2.py M

Soal Assesmen > soal2.py > ...

```python
def cek_palindrom(kalimat):
    kalimat = kalimat.lower().replace(" ", "")
    reversed_kalimat = kalimat[::-1]

    if kalimat == reversed_kalimat:
        return "eureeka!"
    else:
        return "suka blyat"

output_1 = cek_palindrom("Angsa")
print(output_1)

output_2 = cek_palindrom("KataK")
print(output_2)

output_3 = cek_palindrom("kasur empuk")
print(output_3)

output_4 = cek_palindrom("Aku Suka Kamu")
print(output_4)

output_5 = cek_palindrom("Ibu Ratna antar ubi.")
print(output_5)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python
esmen\soal2.py"
suka blyat
eureeka!
suka blyat
suka blyat
suka blyat
```

No.3

soal3.py

Soal Assesmen > soal3.py > siapa_yang_mengambil_kue

```
1   def siapa_yang_mengambil_kue(urutan_kedatangan, foto_kue):
2       urutan_kedatangan.index(foto_kue)
3
4       if foto_kue == 'Xiao':
5           return "Xiao"
6       elif 'air mineral' in urutan_kedatangan[:urutan_kedatangan.inde
7           return "Childe"
8       elif 'memeriksa kue' in urutan_kedatangan[:urutan_kedatangan.in
9           return "Ningguang"
10      else:
11          return "Hutao"
12
13  urutan_kedatangan = ['Ningguang', 'Hutao', 'Xiao', 'Childe']
14  foto_kue = 'Xiao'
15
16  pencuri_kue = siapa_yang_mengambil_kue(urutan_kedatangan, foto_kue)
17  print(f"Menurut logika sederhana, kemungkinan besar kue diambil ole
18
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python
esmen\soal3.py"
Menurut logika sederhana, kemungkinan besar kue diambil oleh: Xiao
```

No.4

soal4.py M

Soal Assesmen > soal4.py > ...

```python
def cek_duplikat(angka):
    angka_set = set()

    for num in angka:
        if num in angka_set:
            return True
        angka_set.add(num)

    return False

input_data = [20, 1, 3, 2, 4, 6, 8, 5, 7, 9, 11, 13, 15, 10, 12, 14

output = cek_duplikat(input_data)
print(output)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python
esmen\soal4.py"
True
```

No.5

soal5.py M

Soal Assesmen > soal5.py > ...

```python
from itertools import permutations

def hitung_kombinasi_username(nama_lengkap):
    nama_lengkap = nama_lengkap.replace(" ", "").lower()

    semua_kombinasi = []
    for i in range(1, 7):
        kombinasi = permutations(nama_lengkap, i)
        semua_kombinasi.extend(kombinasi)

    jumlah_kombinasi = len(set(map(lambda x: ''.join(x), semua_kombinasi)))

    return jumlah_kombinasi

nama_lengkap = "Naip Lovyu"

jumlah_kombinasi = hitung_kombinasi_username(nama_lengkap)
print(f"Jumlah kombinasi username yang mungkin adalah: {jumlah_kombinasi}")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python -u "c:\Us
esmen\soal5.py"
Jumlah kombinasi username yang mungkin adalah: 79209
```

No.6

soal6.py

Soal Assesmen > soal6.py > menu

```python
menu = [
    {"Nama": "Ayam Goreng Krispi", "Tipe": "Makanan", "Harga": 15000},
    {"Nama": "Ayam Puk Puk (Bukan digeprek)", "Tipe": "Makanan", "Harga": 13000},
    {"Nama": "Ayam Bakar", "Tipe": "Makanan", "Harga": 20000},
    {"Nama": "Es teh", "Tipe": "Minuman", "Harga": 5000},
    {"Nama": "Es Jeruk", "Tipe": "Minuman", "Harga": 7000}
]

def hitung_biaya(pesanan):
    subtotal = 0
    for item in pesanan:
        for m in menu:
            if m["Nama"] == item:
                subtotal += m["Harga"]
                if m["Tipe"] == "Makanan":
                    subtotal += m["Harga"] * 0.05
                else:
                    subtotal += m["Harga"] * 0.03
                break
    return subtotal

pesanan_rehan = ["Ayam Bakar", "Ayam Bakar", "Es teh"]
pesanan_amba = ["Ayam Puk Puk (Bukan digeprek)", "Es teh", "Es teh", "Es teh"]
pesanan_faiz = ["Ayam Goreng Krispi", "Ayam Puk Puk (Bukan digeprek)", "Ayam Bakar", "Es teh", "Es Jeruk"]

biaya_rehan = hitung_biaya(pesanan_rehan)
biaya_amba = hitung_biaya(pesanan_amba)
biaya_faiz = hitung_biaya(pesanan_faiz)

print(f"Rehan Whangsap harus membayar: Rp {biaya_rehan}")
print(f"Amba Roni harus membayar: Rp {biaya_amba}")
print(f"Faiz Ngawi harus membayar: Rp {biaya_faiz}")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python -u "c:\Users\ACER\Dropbox\PC\Documents\Coolyeah
esmen\soal6.py"
Rehan Whangsap harus membayar: Rp 47150.0
Amba Roni harus membayar: Rp 29100.0
Faiz Ngawi harus membayar: Rp 62760.0
```

No.7

soal7.py M

Soal Assesmen > soal7.py > ...

```python
def dekripsi_pesan(pesan_terenkripsi):
    pesan_terdekripsi = ""
    for huruf in pesan_terenkripsi:
        if huruf.isalpha():
            huruf_terdekripsi = chr(((ord(huruf) - 97 - 5) % 26) + 97) if huruf.islower() else chr(((ord(huruf) - 65 - 5) % 26) + 65)
            pesan_terdekripsi += huruf_terdekripsi
        else:
            pesan_terdekripsi += huruf
    return pesan_terdekripsi

pesan_terenkripsi = [
    "xfqfr bfmdz",
    "gjxtp lzj rfz ifkyfw jxi snm",
    "gwt, gjxtp qz rfz rfpfs in bfwlty lfp?",
    "fpz xfdfsl pfrz, rfz lfp ofin ufhfwpz",
    "dfsl pnwnr xynhpjw otrtp pz pnhp ifwn lwzu"
]

for index, pesan in enumerate(pesan_terenkripsi):
    pesan_terdekripsi = dekripsi_pesan(pesan)
    print(f"Pesan {index + 1}: {pesan_terdekripsi}")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python -u "c:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG\
esmen\soal7.py"
Pesan 1: salam wahyu
Pesan 2: besok gue mau daftar esd nih
Pesan 3: bro, besok lu mau makan di wargot gak?
Pesan 4: aku sayang kamu, mau gak jadi pacarku
Pesan 5: yang kirim sticker jomok ku kick dari grup
```

No.8

soal8.py M

Soal Assesmen > soal8.py > ...

```python
produk = [
    {"Nama": "TV", "Kategori": "elektronik", "Harga": 1000},
    {"Nama": "headphone", "Kategori": "elektronik", "Harga": 200},
    {"Nama": "baju", "Kategori": "fashion", "Harga": 50},
    {"Nama": "gitar", "Kategori": "musik", "Harga": 300},
    {"Nama": "sepatu", "Kategori": "olahraga", "Harga": 80},
    {"Nama": "kamera", "Kategori": "elektronik", "Harga": 600}
]

data_pelanggan = {
    "Rina": {"Minat": ["elektronik", "musik"], "Beli": ["TV", "headphone"]},
    "Budi": {"Minat": ["fashion", "musik"], "Beli": ["baju", "gitar"]},
    "Hartono": {"Minat": ["olahraga", "elektronik"], "Beli": ["sepatu", "kamera"]}
}

def rekomendasi_produk(nama_pelanggan):
    minat_pelanggan = data_pelanggan[nama_pelanggan]["Minat"]

    rekomendasi = []
    for p in produk:
        if p["Kategori"] in minat_pelanggan:
            rekomendasi.append(p["Nama"])

    return rekomendasi

rekomendasi_rina = rekomendasi_produk("Rina")
print(f"Rina {rekomendasi_rina}")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python -u "c:\Users\ACER
esmen\soal8.py"
Rina ['TV', 'headphone', 'gitar', 'kamera']
```

No.9

soal9.py M

Soal Assesmen > soal9.py > ...

```python
from collections import Counter

def cek_anak_nakal(nama_anak):
    counter_nama = Counter(nama_anak)
    max_kemunculan = max(counter_nama.values())

    if max_kemunculan == 1:
        return "Semuanya anak baik"
    else:
        anak_nakal = [nama for nama, kemunculan in counter_nama.items() if kemunculan == max_kemunculan]
        return ' dan '.join(anak_nakal) + " Nakal"

percakapan_1 = ["Bagas", "Dimas", "Bagas", "Bagas", "Indra", "Gilang", "Gilang", "Hana", "Fajar", "Fajar"]
percakapan_2 = ["Bagas", "Dimas", "Fajar", "Bagas", "Indra", "Gilang", "Gilang", "Bagas", "Fajar", "Fajar"]
percakapan_3 = ["Aisyah", "Bagas", "Dewi", "Dimas", "Eka", "Fajar", "Gilang", "Hana", "Indra", "Jihan"]

hasil_1 = cek_anak_nakal(percakapan_1)
hasil_2 = cek_anak_nakal(percakapan_2)
hasil_3 = cek_anak_nakal(percakapan_3)

print(hasil_1)
print(hasil_2)
print(hasil_3)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python -u "c:\Users\ACER\Dropbox\PC\Documents\Coolyeah\
esmen\soal9.py"
Bagas Nakal
Bagas dan Fajar Nakal
Semuanya anak baik
```

No.10

soal10.py

Soal Assesmen > soal10.py > hitung_kembalian

```python
def hitung_kembalian(total_pembayaran, total_belanja):
    pecahan = [100000, 50000, 20000, 10000, 5000, 2000, 1000, 500, 200, 100]
    kembalian = total_pembayaran - total_belanja
    hasil = {}

    for nilai in pecahan:
        if kembalian >= nilai:
            jumlah = kembalian // nilai
            hasil[str(nilai)] = jumlah
            kembalian -= nilai * jumlah

    return hasil

# Contoh penggunaan
hasil_1 = hitung_kembalian(10000, 7500)
hasil_2 = hitung_kembalian(5000, 1100)
hasil_3 = hitung_kembalian(178000, 90500)

print(hasil_1)
print(hasil_2)
print(hasil_3)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\ACER\Dropbox\PC\Documents\Coolyeah\Semester 3\10. ESD SG> python -u "c:\Users
esmen\soal10.py"
{'2000': 1, '500': 1}
{'2000': 1, '1000': 1, '500': 1, '200': 2}
{'50000': 1, '20000': 1, '10000': 1, '5000': 1, '2000': 1, '500': 1}
```