

Nama : Sukma Nindi Listyarini  
Kelas : D  
NIM : L200170147

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## Modul 8

### Laporan Praktikum - Algoritma dan Struktur Data

1. Membuat program konversi dari bilangan decimal ke bilangan heksadesimal.

```
from stack import Stack

def cetakHexa():
    a = int(input("Masukkan bilangan desimal = "))
    hexa = Stack()
    hexlist = "0123456789ABCDEF"
    while a!=0:
        sisa = a%16
        a = a//16
        hexa.push(hexlist[sisa])
    hasil=""
    for i in range(len(hexa)):
        hasil = hasil+str(hexa.pop())
    return hasil

print(cetakHexa())
```

#### Hasil run

```
Python 2.7.14 (v2.7.14:84471935ed, Sep 16 2017, 20:19:30) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: E:\INFORMATIKA\SEMESTER 4\LAPRAK ALGOSTRUK\MODUL 8\Modul8_D_130 [Stack s]\Nomor 1.py
Masukkan bilangan desimal = 12
C
>>>
RESTART: E:\INFORMATIKA\SEMESTER 4\LAPRAK ALGOSTRUK\MODUL 8\Modul8_D_130 [Stack s]\Nomor 1.py
Masukkan bilangan desimal = 31
1F
>>>
RESTART: E:\INFORMATIKA\SEMESTER 4\LAPRAK ALGOSTRUK\MODUL 8\Modul8_D_130 [Stack s]\Nomor 1.py
Masukkan bilangan desimal = 229
E5
>>>
RESTART: E:\INFORMATIKA\SEMESTER 4\LAPRAK ALGOSTRUK\MODUL 8\Modul8_D_130 [Stack s]\Nomor 1.py
Masukkan bilangan desimal = 255
FF
>>>
RESTART: E:\INFORMATIKA\SEMESTER 4\LAPRAK ALGOSTRUK\MODUL 8\Modul8_D_130 [Stack s]\Nomor 1.py
Masukkan bilangan desimal = 31519
7B1F
>>>
```

## 2. Mengeksekusi program dibawah dan menjelaskannya

```
from stack import Stack
```

Membuat suatu stack baru yang kosong.

```
nilai = Stack()
```

Mengisi parameter dengan 16

```
for i in range(16):
```

```
    if i%3==0:
```

```
        nilai.push(i)
```

Jika i dapat dibagi dengan 3, kondisi bernilai true maka ekspresi akan melakukan push.

```
print(nilai.items)
```

### Hasil run

```
Python 2.7.14 (v2.7.14:84471935ed, Sep 16 2017, 20:19:30) [MSC v.1500 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: E:\INFORMATIKA\SEMESTER 4\LAPRAK ALGOSTRUK\MODUL 8\Modul8_D_130 [Stack s]\Nomor 2.py
[0, 3, 6, 9, 12, 15]
>>>
```

### Gambar

|    |
|----|
| 15 |
| 12 |
| 9  |
| 6  |
| 3  |
| 0  |

## 3. Mengeksekusi program dan menjelaskannya

```
from stack import Stack
```

```
i = Stack()
```

```
i in range(16):
```

```
if i%3==0:
```

```
    nilai.push(i)
```

```
elif i%4==0:
```

```
    nilai.pop()
```