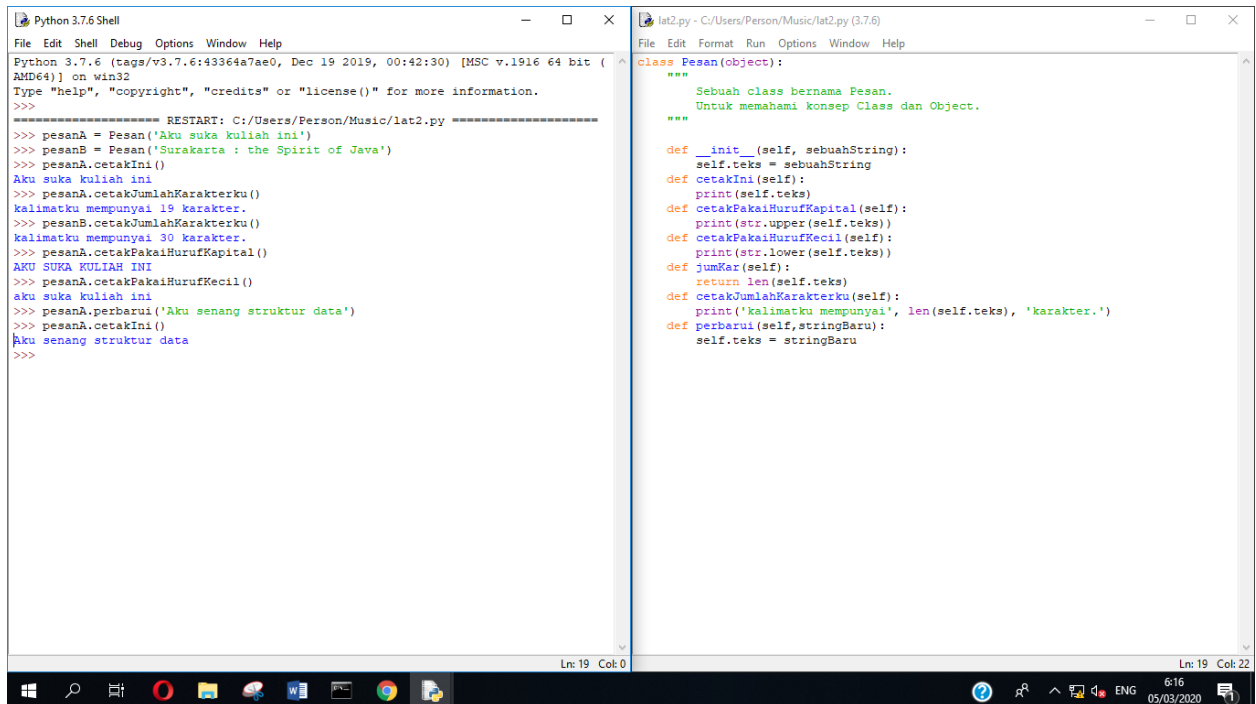


```
Python 3.7.6 Shell
File Edit Shell Debug Options Window Help
>>> mpp.dafarBaju
['batik', 'loreng', 'resmi berdasi']
>>> mpp.jumlahBaju
3
>>> from ModulePythonPertamaku import ucapkanSalam as ucap
>>> ucap()
Assalamu'alikum
>>> dir()
['ModulePythonPertamaku', '__annotations__', '__builtins__', '__doc__', '__loader__'
, '__name__', '__package__', '__spec__', 'mpp', 'ucap']
>>> import math as m
>>> dir()
['ModulePythonPertamaku', '__annotations__', '__builtins__', '__doc__', '__loader__'
, '__name__', '__package__', '__spec__', 'm', 'mpp', 'ucap']
>>> dir(m)
['__doc__', '__loader__', '__name__', '__package__', '__spec__', 'acos', 'acosh',
'asin', 'asinh', 'atan', 'atan2', 'atanh', 'ceil', 'copysign', 'cos', 'cosh', 'de
grees', 'e', 'erf', 'erfc', 'exp', 'expm1', 'fabs', 'factorial', 'floor', 'fmod',
'frexp', 'fsum', 'gamma', 'gcd', 'hypot', 'inf', 'isclose', 'isfinite', 'isinf',
'isnan', 'ldexp', 'lgamma', 'log', 'log10', 'log1p', 'log2', 'modf', 'nan', 'pi',
'pow', 'radians', 'remainder', 'sin', 'sinh', 'sqrt', 'tan', 'tanh', 'tau', 'trun
c']
>>> from sys import *
>>> dir()
['ModulePythonPertamaku', '__annotations__', '__builtins__', '__doc__', '__loader__'
, '__name__', '__package__', '__spec__', 'api_version', 'argv', 'Base_exec_pre
fix', 'base_prefix', 'breakpointhook', 'builtin_module_names', 'byteorder', 'cell
_tracing', 'callstats', 'copyright', 'displayhook', 'dlihandle', 'dont_write_byte
code', 'exec_info', 'excepthook', 'exec_prefix', 'executable', 'exit', 'flags', 'f
loat_info', 'float_repr_style', 'get_asynogen_hooks', 'get_coroutine_origin_track
ing_depth', 'get_coroutine_wrapper', 'getallocatedblocks', 'getcheckinterval', 'g
etdefaultencoding', 'getfilesystemcodeerrors', 'getfilesystemencoding', 'getpro
file', 'getrecursionlimit', 'getrefcount', 'getsizeof', 'getswitchinterval', 'get
trace', 'getwindosversion', 'hash_info', 'hexversion', 'implementation', 'int_in
fo', 'isatty', 'is_finalizing', 'm', 'maxsize', 'maxunicode', 'meta_path', 'modul
es', 'mpp', 'path', 'patch_hooks', 'path_importer_cache', 'platform', 'prefix', 's
et_asynogen_hooks', 'set_coroutine_origin_tracking_depth', 'set_coroutine_wrapper'
, 'setcheckinterval', 'setprofile', 'setrecursionlimit', 'setswitchinterval', 's
ettrace', 'stderr', 'stdin', 'stdout', 'thread_info', 'ucap', 'version', 'version
_info', 'warnoptions', 'winver']
>>> |
```

Latihan 2



The image shows a screenshot of a Windows desktop with two windows open. The left window is a Python 3.7.6 Shell, and the right window is a Python script editor showing the code for a class named `Pesan`.

Python 3.7.6 Shell (Left Window):

```
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Person/Music/lat2.py =====
>>> pesanA = Pesan('Aku suka kuliah ini')
>>> pesanB = Pesan('Surakarta : the Spirit of Java')
>>> pesanA.cetakIni()
Aku suka kuliah ini
>>> pesanA.cetakJumlahKarakterku()
kalimatku mempunyai 19 karakter.
>>> pesanB.cetakJumlahKarakterku()
kalimatku mempunyai 30 karakter.
>>> pesanA.cetakPakaiHurufKapital()
AKU SUKA KULIAH INI
>>> pesanA.cetakPakaiHurufKecil()
aku suka kuliah ini
>>> pesanA.perbarui('Aku senang struktur data')
>>> pesanA.cetakIni()
Aku senang struktur data
>>>
```

Python Script Editor (Right Window):

```
class Pesan(object):
    """
    Sebuah class bernama Pesan.
    Untuk memahami konsep Class dan Object.
    """

    def __init__(self, sebuahString):
        self.teks = sebuahString

    def cetakIni(self):
        print(self.teks)

    def cetakPakaiHurufKapital(self):
        print(str.upper(self.teks))

    def cetakPakaiHurufKecil(self):
        print(str.lower(self.teks))

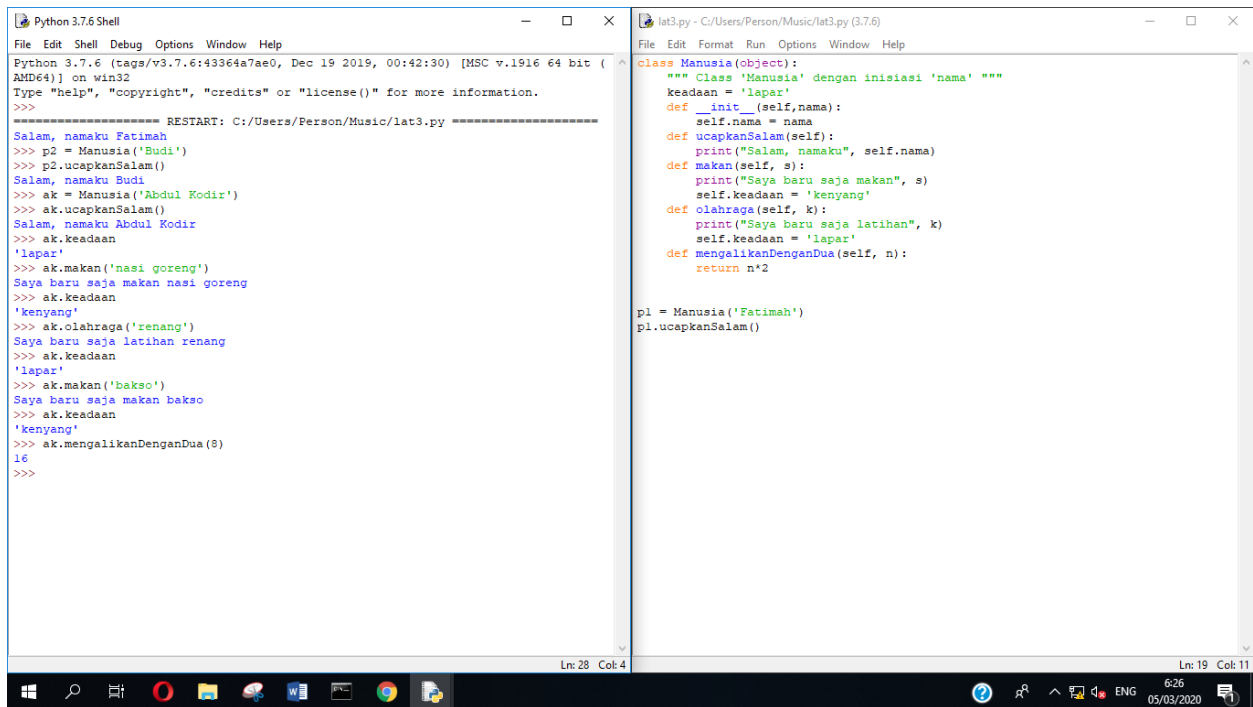
    def jumKar(self):
        return len(self.teks)

    def cetakJumlahKarakterku(self):
        print('kalimatku mempunyai', len(self.teks), 'karakter.')

    def perbarui(self, stringBaru):
        self.teks = stringBaru
```

The taskbar at the bottom shows the Windows Start button, search icon, task view icon, and several application icons. The system tray on the right shows the time as 6:16 and the date as 05/03/2020.

Latihan 3



The image shows a screenshot of a Python 3.7.6 IDE with two windows. The left window, titled 'Python 3.7.6 Shell', displays the execution of a script. The right window, titled 'lat3.py - C:/Users/Person/Music/lat3.py (3.7.6)', shows the source code of the script.

```
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Person/Music/lat3.py =====
Salam, namaku Fatimah
>>> p2 = Manusia('Budi')
>>> p2.ucapkanSalam()
Salam, namaku Budi
>>> ak = Manusia('Abdul Kodir')
>>> ak.ucapkanSalam()
Salam, namaku Abdul Kodir
>>> ak.keadaan
'lapar'
>>> ak.makan('nasi goreng')
Saya baru saja makan nasi goreng
>>> ak.keadaan
'kenyang'
>>> ak.olahraga('renang')
Saya baru saja latihan renang
>>> ak.keadaan
'lapar'
>>> ak.makan('bakso')
Saya baru saja makan bakso
>>> ak.keadaan
'kenyang'
>>> ak.mengalikanDenganDua(8)
16
>>>
```

```
class Manusia(object):
    """ Class 'Manusia' dengan inisiasi 'nama' """
    keadaan = 'lapar'
    def __init__(self, nama):
        self.nama = nama
    def ucapkanSalam(self):
        print("Salam, namaku", self.nama)
    def makan(self, s):
        print("Saya baru saja makan", s)
        self.keadaan = 'kenyang'
    def olahraga(self, k):
        print("Saya baru saja latihan", k)
        self.keadaan = 'lapar'
    def mengalikanDenganDua(self, n):
        return n*2

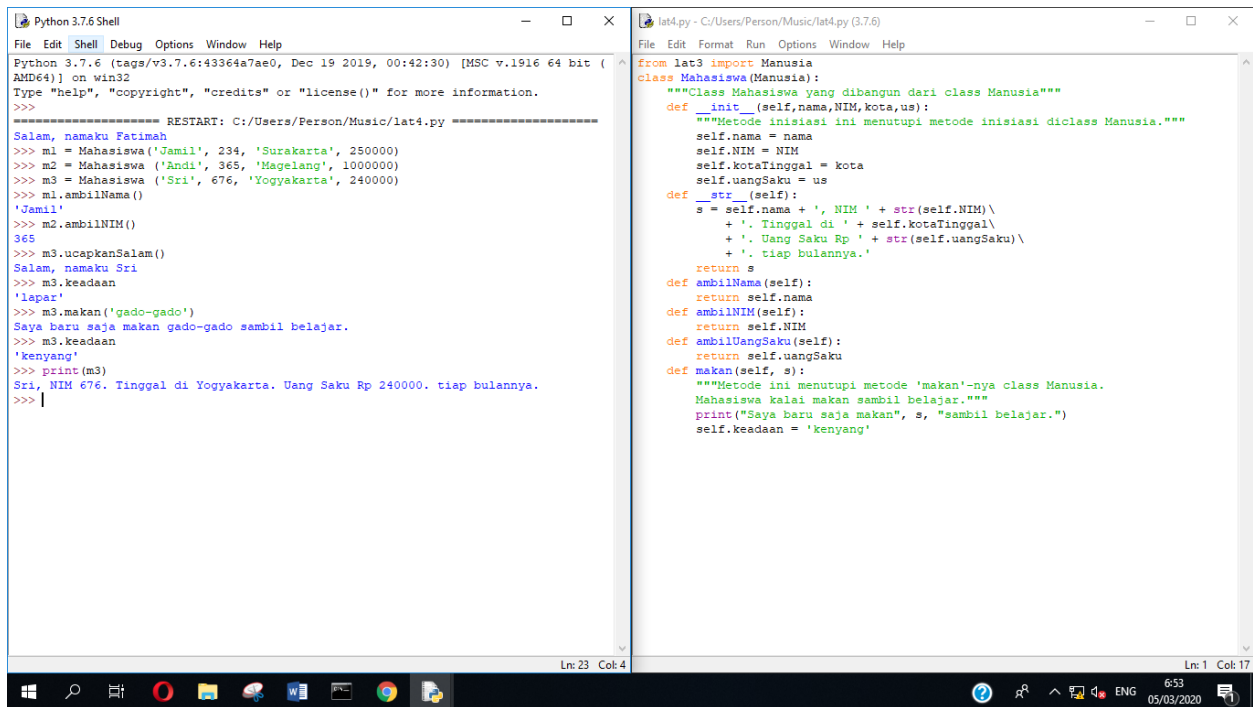
p1 = Manusia('Fatimah')
p1.ucapkanSalam()
```

Ln: 28 Col: 4

Ln: 19 Col: 11

626
05/03/2020

Latihan 4



The image shows two windows from a Windows operating system. The left window is a Python 3.7.6 Shell, and the right window is a Python script editor for a file named 'lat4.py'.

Python 3.7.6 Shell (Left Window):

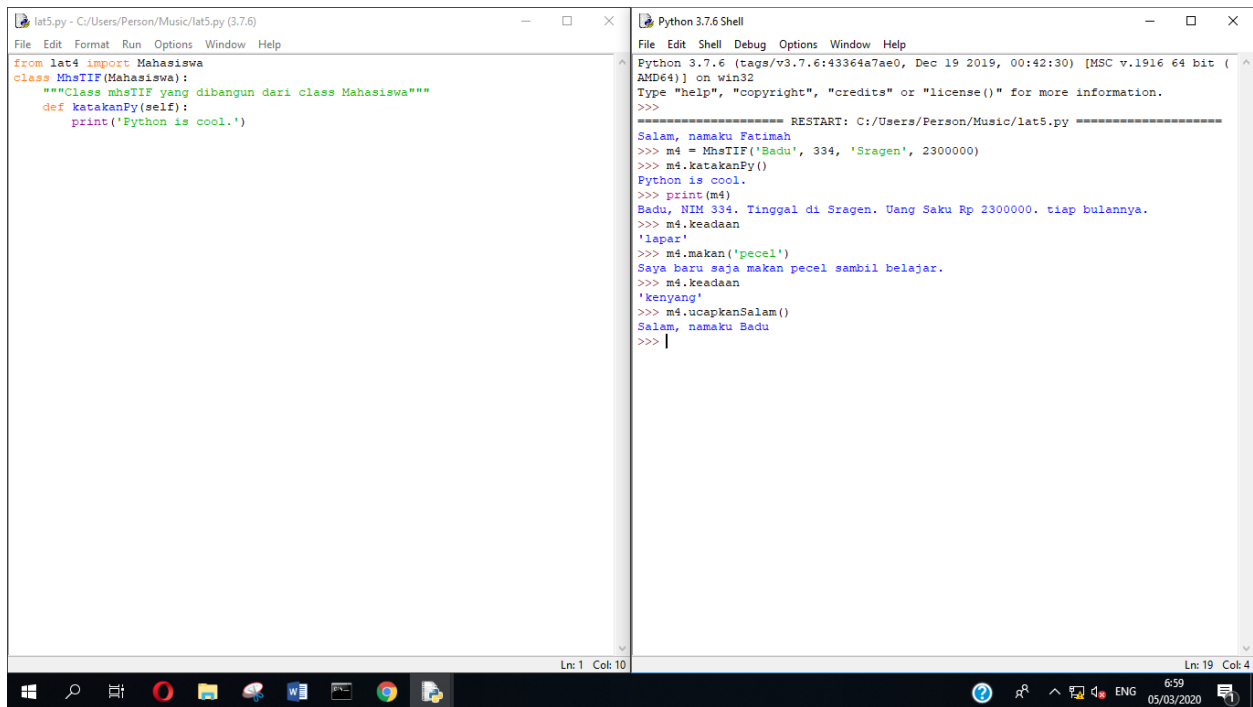
```
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Person/Music/lat4.py =====
Salam, namaku Fatimah
>>> m1 = Mahasiswa('Jamil', 234, 'Surakarta', 250000)
>>> m2 = Mahasiswa ('Andi', 365, 'Magelang', 1000000)
>>> m3 = Mahasiswa ('Sri', 676, 'Yogyakarta', 240000)
>>> m1.ambilNama()
'Jamil'
>>> m2.ambilNIM()
365
>>> m3.ucapkanSalam()
Salam, namaku Sri
>>> m3.keadaan
'lapar'
>>> m3.makan('gado-gado')
Saya baru saja makan gado-gado sambil belajar.
>>> m3.keadaan
'kenyang'
>>> print(m3)
Sri, NIM 676. Tinggal di Yogyakarta. Uang Saku Rp 240000. tiap bulannya.
>>>
```

lat4.py - C:/Users/Person/Music/lat4.py (3.7.6) (Right Window):

```
from lat3 import Manusia
class Mahasiswa(Manusia):
    """Class Mahasiswa yang dibangun dari class Manusia"""
    def __init__(self,nama,NIM,kota,us):
        """Metode inisiasi ini menutupi metode inisiasi di class Manusia."""
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uangSaku = us
    def __str__(self):
        s = self.nama + ', NIM ' + str(self.NIM)\
            + '. Tinggal di ' + self.kotaTinggal\
            + '. Uang Saku Rp ' + str(self.uangSaku)\
            + '. tiap bulannya.'
        return s
    def ambilNama(self):
        return self.nama
    def ambilNIM(self):
        return self.NIM
    def ambilUangSaku(self):
        return self.uangSaku
    def makan(self, s):
        """Metode ini menutupi metode 'makan'-nya class Manusia.
        Mahasiswa kalau makan sambil belajar."""
        print("Saya baru saja makan", s, "sambil belajar.")
        self.keadaan = 'kenyang'
```

The taskbar at the bottom shows the Windows Start button, search icon, task view icon, and several application icons including Edge, File Explorer, and Word. The system tray on the right shows the date and time as 05/03/2020, 6:53.

Latihan 5



The image shows a screenshot of a Python IDE with two windows. The left window, titled 'lat5.py - C:/Users/Person/Music/lat5.py (3.7.6)', contains the following Python code:

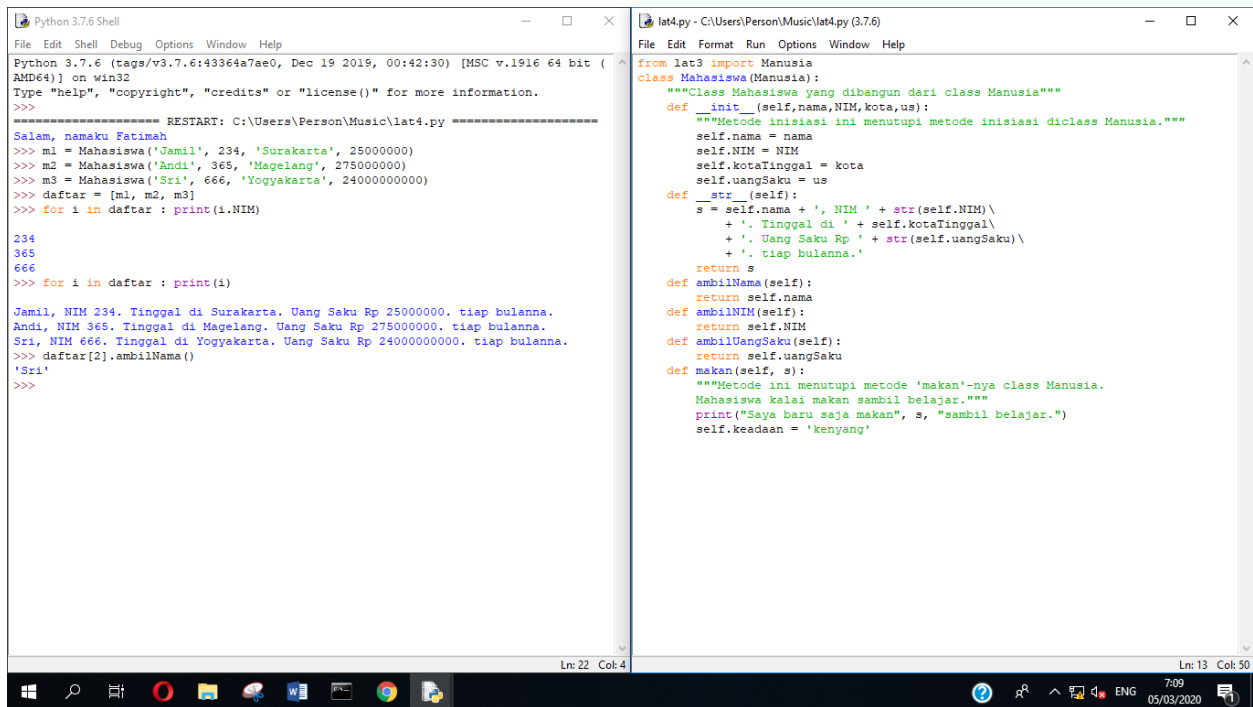
```
from lat4 import Mahasiswa
class MhsTIF(Mahasiswa):
    """Class mhsTIF yang dibangun dari class Mahasiswa"""
    def katakanPy(self):
        print('Python is cool.')
```

The right window, titled 'Python 3.7.6 Shell', shows the execution of the code. It starts with a restart message and then displays the output of the class instantiation and method calls:

```
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Person/Music/lat5.py =====
Salam, namaku Fatimah
>>> m4 = MhsTIF('Badu', 334, 'Sragen', 2300000)
>>> m4.katakanPy()
Python is cool.
>>> print(m4)
Badu, NIM 334. Tinggal di Sragen. Uang Saku Rp 2300000. tiap bulannya.
>>> m4.keadaan
'lepar'
>>> m4.makan('pecel')
Saya baru saja makan pecel sambil belajar.
>>> m4.keadaan
'kenyang'
>>> m4.ucapkanSalam()
Salam, namaku Badu
>>> |
```

The taskbar at the bottom shows the Windows Start button, search icon, and several application icons including File Explorer, Edge, Word, and Chrome. The system clock in the bottom right corner indicates the time is 6:59 on 05/03/2020.

Latihan 6

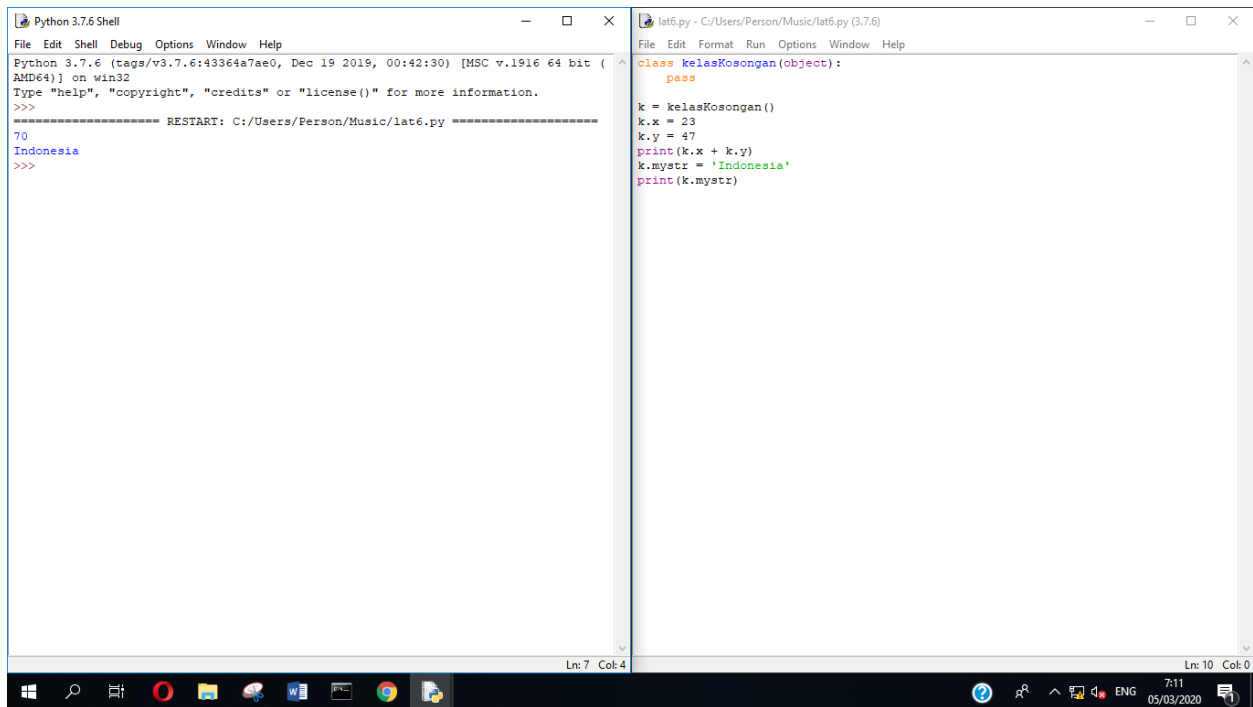


The image shows two side-by-side windows of a Python 3.7.6 Shell. The left window displays the execution of a script that defines a `Mahasiswa` class and tests its methods. The right window shows the source code of the `lat4.py` file, which defines the `Mahasiswa` class and its methods.

```
Python 3.7.6 Shell
File Edit Shell Debug Options Window Help
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Person\Music\lat4.py =====
Salem, namaku Fatimah
>>> m1 = Mahasiswa('Jamil', 234, 'Surakarta', 25000000)
>>> m2 = Mahasiswa('Andi', 365, 'Magelang', 275000000)
>>> m3 = Mahasiswa('Sri', 666, 'Yogyakarta', 240000000000)
>>> daftar = [m1, m2, m3]
>>> for i in daftar : print(i.NIM)
234
365
666
>>> for i in daftar : print(i)
Jamil, NIM 234. Tinggal di Surakarta. Uang Saku Rp 25000000. tiap bulanna.
Andi, NIM 365. Tinggal di Magelang. Uang Saku Rp 275000000. tiap bulanna.
Sri, NIM 666. Tinggal di Yogyakarta. Uang Saku Rp 240000000000. tiap bulanna.
>>> daftar[2].ambilNama()
'Sri'
>>>
```

```
lat4.py - C:\Users\Person\Music\lat4.py (3.7.6)
File Edit Format Run Options Window Help
from lat3 import Manusia
class Mahasiswa(Manusia):
    """Class Mahasiswa yang dibangun dari class Manusia"""
    def __init__(self, nama, NIM, kota, us):
        """Metode inisiasi ini menutupi metode inisiasi di class Manusia."""
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uangSaku = us
    def __str__(self):
        s = self.nama + ', NIM ' + str(self.NIM)\
            + '. Tinggal di ' + self.kotaTinggal\
            + '. Uang Saku Rp ' + str(self.uangSaku)\
            + '. tiap bulanna.'
        return s
    def ambilNama(self):
        return self.nama
    def ambilNIM(self):
        return self.NIM
    def ambilUangSaku(self):
        return self.uangSaku
    def makan(self, s):
        """Metode ini menutupi metode 'makan'-nya class Manusia.
        Mahasiswa kalau makan sambil belajar."""
        print("Saya baru saja makan", s, "sambil belajar.")
        self.keadaan = 'kenyang'
```

Latihan 7



The image shows a screenshot of a Python 3.7.6 IDE with two windows. The left window, titled 'Python 3.7.6 Shell', displays the output of a script execution. The right window, titled 'lat6.py - C:/Users/Person/Music/lat6.py (3.7.6)', shows the source code of the script.

Python 3.7.6 Shell Output:

```
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Person/Music/lat6.py =====
70
Indonesia
>>>
```

lat6.py Source Code:

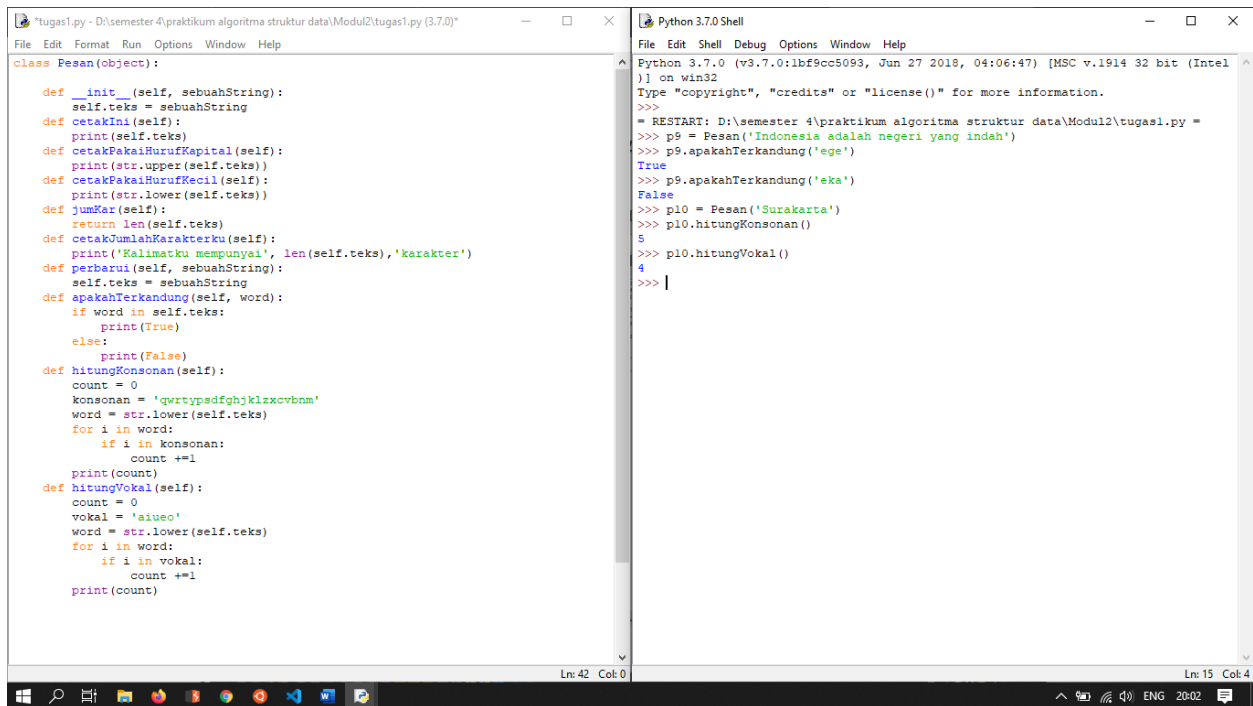
```
class kelasKosongan(object):
    pass

k = kelasKosongan()
k.x = 23
k.y = 47
print(k.x + k.y)
k.mystr = 'Indonesia'
print(k.mystr)
```

The taskbar at the bottom shows the Windows Start button, search icon, task view icon, and several application icons including Edge, File Explorer, Word, and Chrome. The system tray on the right indicates the time is 7:11 and the date is 05/03/2020.

Tugas

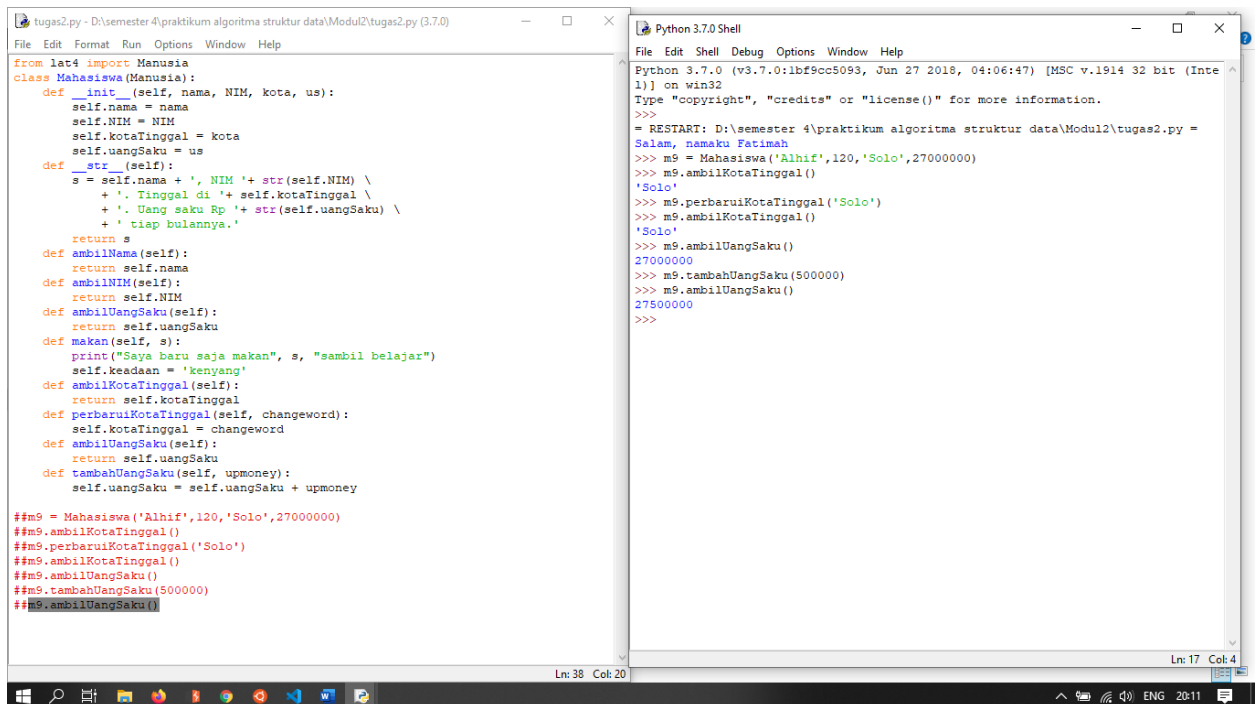
1.



```
class Pesan(object):
    def __init__(self, sebuahString):
        self.teks = sebuahString
    def cetakIni(self):
        print(self.teks)
    def cetakPakaiHurufKapital(self):
        print(str.upper(self.teks))
    def cetakPakaiHurufKecil(self):
        print(str.lower(self.teks))
    def jumKar(self):
        return len(self.teks)
    def cetakJumlahKarakterku(self):
        print('Kalimatku mempunyai', len(self.teks), 'karakter')
    def perbarui(self, sebuahString):
        self.teks = sebuahString
    def apakahTerkandung(self, word):
        if word in self.teks:
            print(True)
        else:
            print(False)
    def hitungKonsonan(self):
        count = 0
        konsonan = 'qwertyuiopasdfghjklzxcvbnm'
        word = str.lower(self.teks)
        for i in word:
            if i in konsonan:
                count += 1
        print(count)
    def hitungVokal(self):
        count = 0
        vokal = 'aiueo'
        word = str.lower(self.teks)
        for i in word:
            if i in vokal:
                count += 1
        print(count)
```

```
Python 3.7.0 Shell
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\semester 4\praktikum algoritma struktur data\Modul2\tugas1.py =
>>> p9 = Pesan('Indonesia adalah negeri yang indah')
>>> p9.apakahTerkandung('ege')
True
>>> p9.apakahTerkandung('eka')
False
>>> p10 = Pesan('Surakarta')
>>> p10.hitungKonsonan()
5
>>> p10.hitungVokal()
4
>>> |
```


2.



The image shows a screenshot of a Python IDE with two windows. The left window is a text editor titled 'tugas2.py - D:\semester 4\praktikum algoritma struktur data\Modul2\tugas2.py (3.7.0)'. It contains a Python class definition for 'Mahasiswa' and a series of test calls. The right window is a 'Python 3.7.0 Shell' showing the execution of the code, with output for each method call.

```
from lat4 import Manusia
class Mahasiswa(Manusia):
    def __init__(self, nama, NIM, kota, us):
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uangSaku = us
    def __str__(self):
        s = self.nama + ', NIM ' + str(self.NIM) \
            + '. Tinggal di ' + self.kotaTinggal \
            + '. Uang saku Rp ' + str(self.uangSaku) \
            + ' tiap bulannya.'
        return s
    def ambilNama(self):
        return self.nama
    def ambilNIM(self):
        return self.NIM
    def ambilUangSaku(self):
        return self.uangSaku
    def makan(self, s):
        print("Saya baru saja makan", s, "sambil belajar")
        self.keadaan = 'kenyang'
    def ambilKotaTinggal(self):
        return self.kotaTinggal
    def perbaruiKotaTinggal(self, changeword):
        self.kotaTinggal = changeword
    def ambilUangSaku(self):
        return self.uangSaku
    def tambahUangSaku(self, upmoney):
        self.uangSaku = self.uangSaku + upmoney

##m9 = Mahasiswa('Alhif',120,'Solo',27000000)
##m9.ambilKotaTinggal()
##m9.perbaruiKotaTinggal('Solo')
##m9.ambilKotaTinggal()
##m9.ambilUangSaku()
##m9.tambahUangSaku(500000)
##m9.ambilUangSaku()
```

```
Python 3.7.0 Shell
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
- RESTART: D:\semester 4\praktikum algoritma struktur data\Modul2\tugas2.py =
Salam, namaku Fatimah
>>> m9 = Mahasiswa('Alhif',120,'Solo',27000000)
>>> m9.ambilKotaTinggal()
'Solo'
>>> m9.perbaruiKotaTinggal('Solo')
>>> m9.ambilKotaTinggal()
'Solo'
>>> m9.ambilUangSaku()
27000000
>>> m9.tambahUangSaku(500000)
>>> m9.ambilUangSaku()
27500000
>>>
```

Ln: 38 Col: 20

Ln: 17 Col: 4

Windows taskbar at the bottom shows the time as 20:11 and the language as ENG.

3.

The image shows a screenshot of a Python IDE with two windows. The left window, titled 'tugas3.py - D:\semester 4\praktikum algoritma struktur data\Modul2\tugas3.py (3.7.0)', contains the following Python code:

```
from tugas2 import Mahasiswa

print('Program Input Data Mahasiswa')
nama = input('Masukkan Nama      : ')
nim = int(input('Masukkan NIM      : '))
kota = input('Masukkan Kota      : ')
uang = int(input('Masukkan Uang Saku : '))

mhs = Mahasiswa(nama,nim,kota,uang)
print('\nAnda telah memasukkan data sebagai berikut : \n')
print(mhs)
```

The right window, titled 'Python 3.7.0 Shell', shows the output of the script after execution:

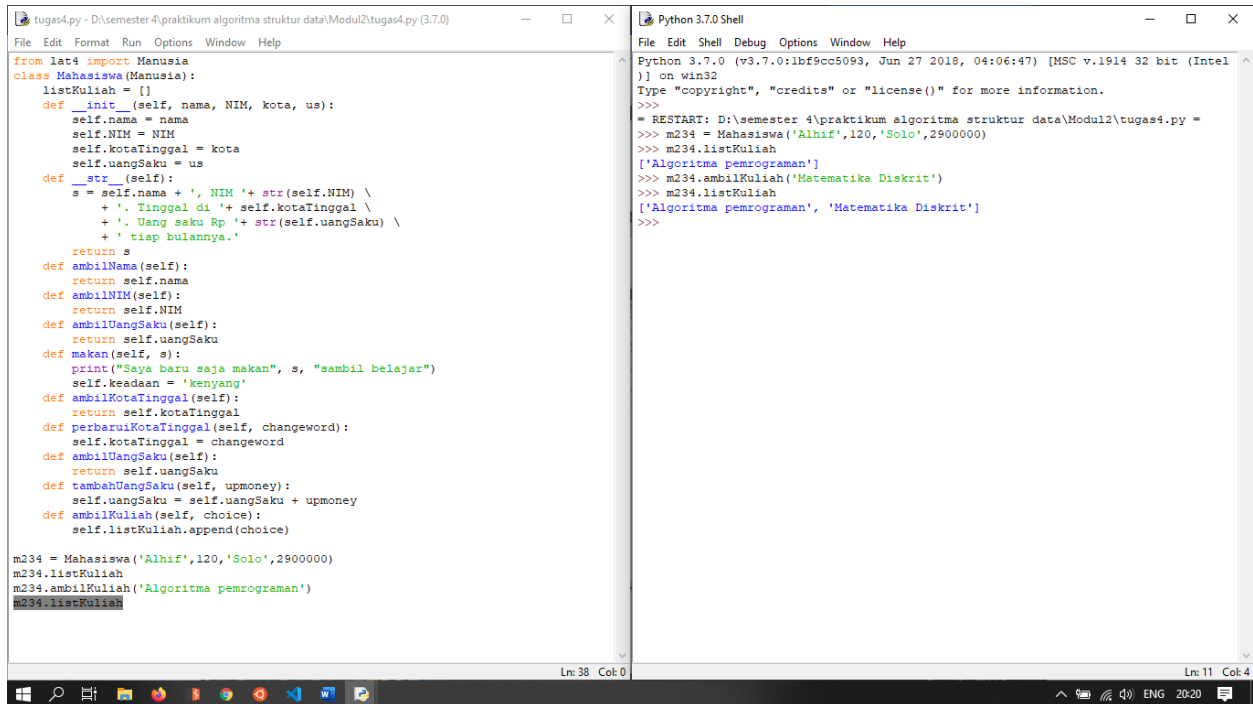
```
Python 3.7.0 (tags/v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\semester 4\praktikum algoritma struktur data\Modul2\tugas3.py =
Program Input Data Mahasiswa
Masukkan Nama      : Maulana Alhif Ikhsan
Masukkan NIM      : 120
Masukkan Kota      : Cirebon
Masukkan Uang Saku : 50000000

Anda telah memasukkan data sebagai berikut :

Maulana Alhif Ikhsan, NIM 120. Tinggal di Cirebon. Uang saku Rp 50000000 tiap bulannya.
>>>
```

The taskbar at the bottom shows the Windows Start button, task view, and several application icons. The system tray on the right indicates the date and time as 20:14.

4.



```
tugas4.py - D:\semester 4\praktikum algoritma struktur data\Modul2\tugas4.py (3.7.0)
File Edit Format Run Options Window Help

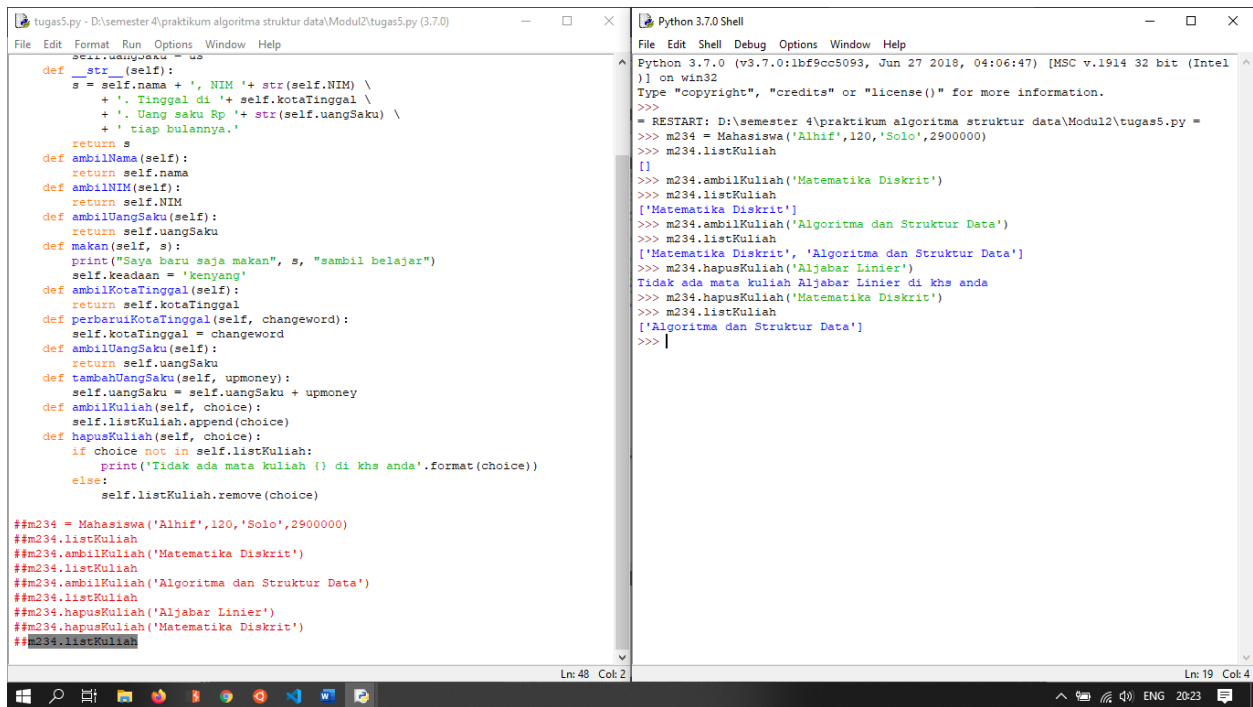
from lat4 import Manusia
class Mahasiswa(Manusia):
    listKuliah = []
    def __init__(self, nama, NIM, kota, us):
        self.nama = nama
        self.NIM = NIM
        self.kotaTinggal = kota
        self.uangSaku = us
    def __str__(self):
        s = self.nama + ', NIM ' + str(self.NIM) \
            + '. Tinggal di ' + self.kotaTinggal \
            + '. Uang saku Rp ' + str(self.uangSaku) \
            + ' tiap bulannya.'
        return s
    def ambilNama(self):
        return self.nama
    def ambilNIM(self):
        return self.NIM
    def ambilUangSaku(self):
        return self.uangSaku
    def makan(self, s):
        print("Saya baru saja makan", s, "sambil belajar")
        self.keadaan = 'kenyang'
    def ambilKotaTinggal(self):
        return self.kotaTinggal
    def perbaruiKotaTinggal(self, changeword):
        self.kotaTinggal = changeword
    def ambilUangSaku(self):
        return self.uangSaku
    def tambahUangSaku(self, upmoney):
        self.uangSaku = self.uangSaku + upmoney
    def ambilKuliah(self, choice):
        self.listKuliah.append(choice)

m234 = Mahasiswa('Alhif', 120, 'Solo', 29000000)
m234.listKuliah
m234.ambilKuliah('Algoritma pemrograman')
m234.listKuliah

Python 3.7.0 Shell
File Edit Shell Debug Options Window Help

Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\semester 4\praktikum algoritma struktur data\Modul2\tugas4.py =
>>> m234 = Mahasiswa('Alhif', 120, 'Solo', 29000000)
>>> m234.listKuliah
[]
>>> m234.ambilKuliah('Algoritma pemrograman')
>>> m234.ambilKuliah('Matematika Diskrit')
>>> m234.listKuliah
['Algoritma pemrograman', 'Matematika Diskrit']
>>>
```

5.



The image shows a Python IDE with two windows. The left window, titled 'tugas5.py - D:\semester 4\praktikum algoritma struktur data\Modul2\tugas5.py (3.7.0)', contains the following Python code:

```
self.uangSaku = us

def __str__(self):
    s = self.nama + ', NIM ' + str(self.NIM) \
        + '. Tinggal di ' + self.kotaTinggal \
        + '. Uang saku Rp ' + str(self.uangSaku) \
        + ' tiap bulannya.'
    return s
def ambilNama(self):
    return self.nama
def ambilNIM(self):
    return self.NIM
def ambilUangSaku(self):
    return self.uangSaku
def makan(self, s):
    print("Saya baru saja makan", s, "sambil belajar")
    self.keadaan = 'kenyang'
def ambilKotaTinggal(self):
    return self.kotaTinggal
def perbaruiKotaTinggal(self, changeword):
    self.kotaTinggal = changeword
def ambilUangSaku(self):
    return self.uangSaku
def tambahUangSaku(self, upmoney):
    self.uangSaku = self.uangSaku + upmoney
def ambilKuliah(self, choice):
    self.listKuliah.append(choice)
def hapusKuliah(self, choice):
    if choice not in self.listKuliah:
        print('Tidak ada mata kuliah {} di khs anda'.format(choice))
    else:
        self.listKuliah.remove(choice)

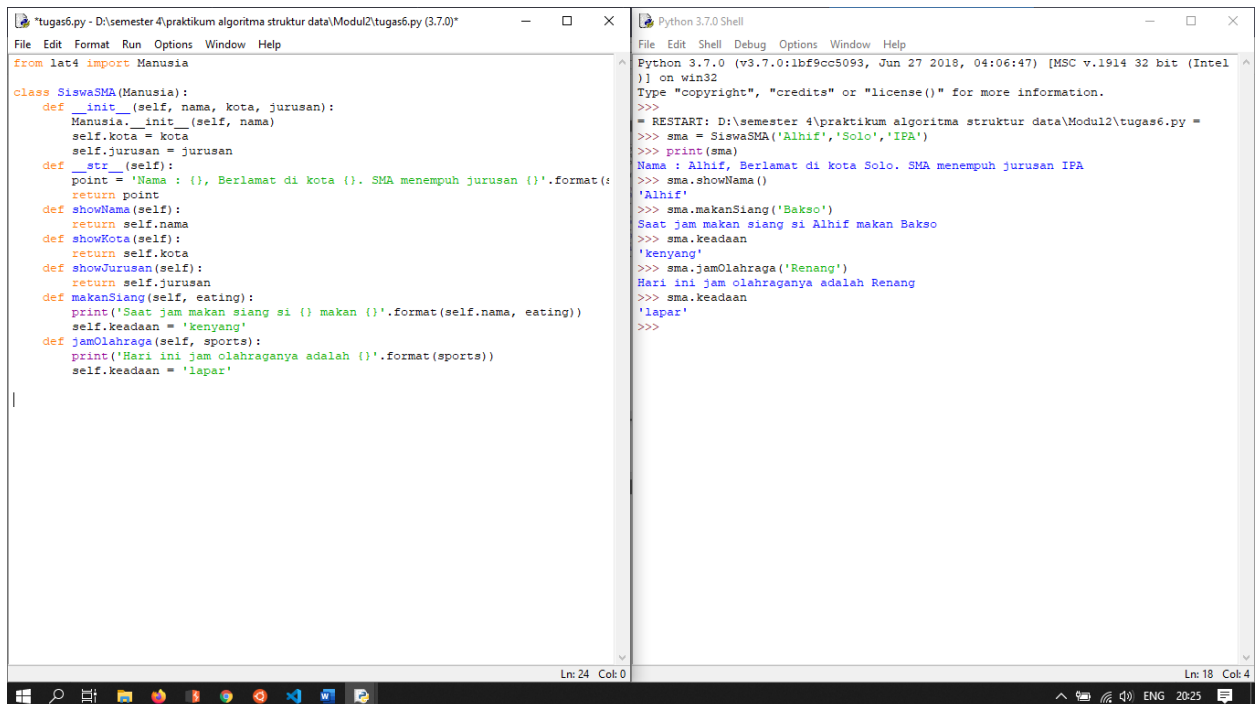
##m234 = Mahasiswa('Alhif',120,'Solo',2900000)
##m234.listKuliah
##m234.ambilKuliah('Matematika Diskrit')
##m234.listKuliah
##m234.ambilKuliah('Algoritma dan Struktur Data')
##m234.listKuliah
##m234.hapusKuliah('Aljabar Linier')
##m234.hapusKuliah('Matematika Diskrit')
##m234.listKuliah
```

The right window, titled 'Python 3.7.0 Shell', shows the execution of the code:

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\semester 4\praktikum algoritma struktur data\Modul2\tugas5.py =
>>> m234 = Mahasiswa('Alhif',120,'Solo',2900000)
>>> m234.listKuliah
[]
>>> m234.ambilKuliah('Matematika Diskrit')
>>> m234.listKuliah
['Matematika Diskrit']
>>> m234.ambilKuliah('Algoritma dan Struktur Data')
>>> m234.listKuliah
['Matematika Diskrit', 'Algoritma dan Struktur Data']
>>> m234.hapusKuliah('Aljabar Linier')
Tidak ada mata kuliah Aljabar Linier di khs anda
>>> m234.hapusKuliah('Matematika Diskrit')
>>> m234.listKuliah
['Algoritma dan Struktur Data']
>>>
```

The status bar at the bottom shows 'Ln: 48 Col: 2' for the left window and 'Ln: 19 Col: 4' for the right window.

6.



The image shows a screenshot of a Python IDE with two windows. The left window is a text editor titled "tugas6.py - D:\semester 4\praktikum algoritma struktur data\Modul2\tugas6.py (3.7.0)". It contains the following Python code:

```
from lat4 import Manusia

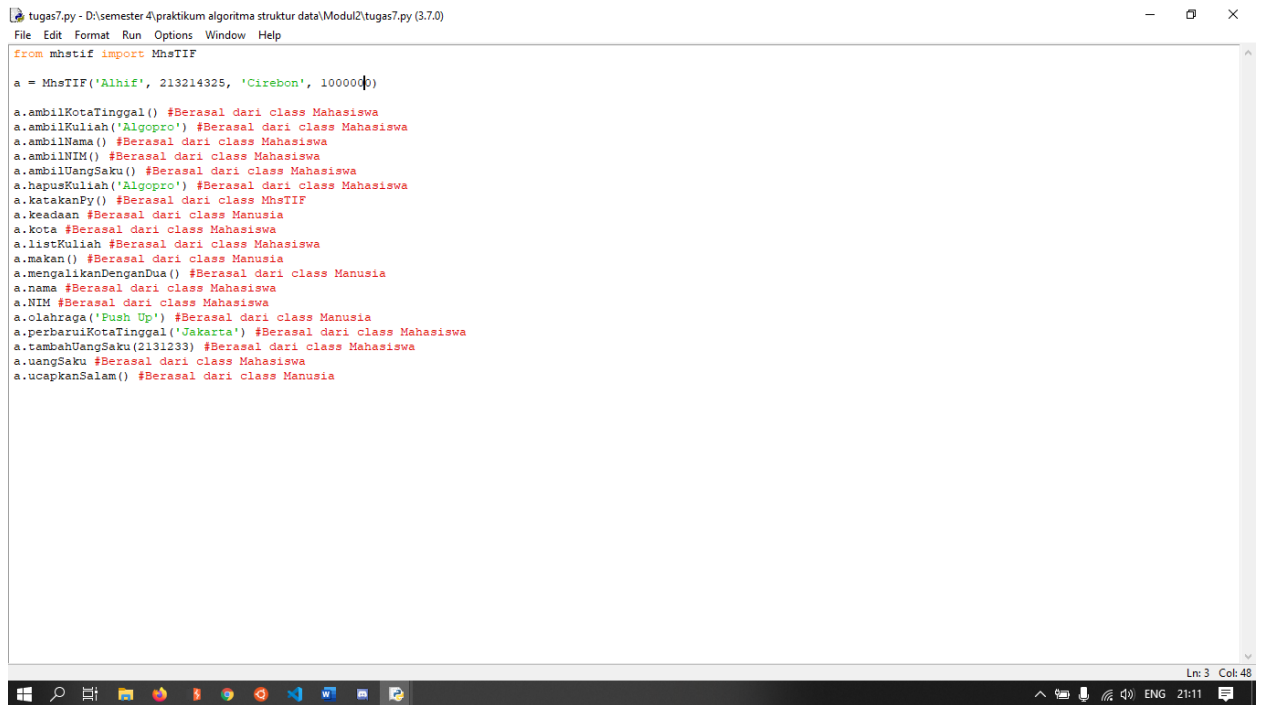
class SiswaSMA(Manusia):
    def __init__(self, nama, kota, jurusan):
        Manusia.__init__(self, nama)
        self.kota = kota
        self.jurusan = jurusan
    def __str__(self):
        point = 'Nama : {}, Beralamat di kota {}. SMA menempuh jurusan {}'.format(
            return point
    def showNama(self):
        return self.nama
    def showKota(self):
        return self.kota
    def showJurusan(self):
        return self.jurusan
    def makanSiang(self, eating):
        print('Saat jam makan siang si {} makan {}'.format(self.nama, eating))
        self.keadaan = 'kenyang'
    def jamOlahraga(self, sports):
        print('Hari ini jam olahraganya adalah {}'.format(sports))
        self.keadaan = 'lapar'
```

The right window is a Python 3.7.0 Shell titled "Python 3.7.0 Shell". It shows the execution of the code from the left window:

```
Python 3.7.0 (v3.7.0:1bf9cc5093, Jun 27 2018, 04:06:47) [MSC v.1914 32 bit (Intel
)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\semester 4\praktikum algoritma struktur data\Modul2\tugas6.py =
>>> sma = SiswaSMA('Alhif','Solo','IPA')
>>> print(sma)
Nama : Alhif, Beralamat di kota Solo. SMA menempuh jurusan IPA
>>> sma.showNama()
'Alhif'
>>> sma.makanSiang('Bakso')
Saat jam makan siang si Alhif makan Bakso
>>> sma.keadaan
'kenyang'
>>> sma.jamOlahraga('Renang')
Hari ini jam olahraganya adalah Renang
>>> sma.keadaan
'lapar'
>>>
```

The taskbar at the bottom shows the Windows Start button, search icon, and several application icons. The system tray on the right shows the date and time as 20:25 and the language as ENG.

7.



The screenshot shows a Python IDE window titled 'tugas7.py - D:\semester 4\praktikum algoritma struktur data\Modul2\tugas7.py (3.7.0)'. The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code in the editor is as follows:

```
from mhsTIF import MhsTIF

a = MhsTIF('Alhif', 213214325, 'Cirebon', 1000000)

a.ambilKotaTinggal() #Berasal dari class Mahasiswa
a.ambilKuliah('AlgoPro') #Berasal dari class Mahasiswa
a.ambilNama() #Berasal dari class Mahasiswa
a.ambilNIM() #Berasal dari class Mahasiswa
a.ambilUangSaku() #Berasal dari class Mahasiswa
a.hapusKuliah('AlgoPro') #Berasal dari class Mahasiswa
a.katakanPy() #Berasal dari class MhsTIF
a.keadaan #Berasal dari class Manusia
a.kota #Berasal dari class Mahasiswa
a.listKuliah #Berasal dari class Mahasiswa
a.makan() #Berasal dari class Manusia
a.mengalikanDenganDua() #Berasal dari class Manusia
a.nama #Berasal dari class Mahasiswa
a.NIM #Berasal dari class Mahasiswa
a.olahraga('Push Up') #Berasal dari class Manusia
a.perbaruiKotaTinggal('Jakarta') #Berasal dari class Mahasiswa
a.tambahUangSaku(2131233) #Berasal dari class Mahasiswa
a.uangSaku #Berasal dari class Mahasiswa
a.ucapkanSalam() #Berasal dari class Manusia
```

The status bar at the bottom indicates 'Ln: 3 Col: 48'.