```
Python 3.11.1 (tags/v3.11.1:a7a450f, Dec 6 2022, 19:58:39) [MSC v.1934 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
d={"id":4654,"name":"surya",101:2345}
{'id': 4654, 'name': 'surya', 101: 2345}
type(d)
<class 'dict'>
len(d)
3
d1=d.copy()
d1
{'id': 4654, 'name': 'surya', 101: 2345}
d1.clear()
d1
{}
len(d1)
0
{'id': 4654, 'name': 'surya', 101: 2345}
d.items()
dict items([('id', 4654), ('name', 'surya'), (101, 2345)])
d.keys()
dict keys(['id', 'name', 101])
d.values()
dict values([4654, 'surya', 2345])
d.get('id')
4654
d.get(id)
d.get(101)
2345
d.get('gender')
d['id']
4654
d[id[
  ]
SyntaxError: incomplete input
```

d[id]

```
Traceback (most recent call last):
 File "<pyshell#21>", line 1, in <module>
  d[id]
KeyError: <built-in function id>
d['name]
SyntaxError: incomplete input
d['name']
'surya'
d['location']
Traceback (most recent call last):
 File "<pyshell#24>", line 1, in <module>
  d['location']
KeyError: 'location'
{'id': 4654, 'name': 'surya', 101: 2345}
len(d)
3
d.setdefault('location')
d
{'id': 4654, 'name': 'surya', 101: 2345, 'location': None}
d.get('location')
d['location']
d.get('location')='vja'
SyntaxError: cannot assign to function call here. Maybe you meant '==' instead
of '='?
d['location']='vja'
d
{'id': 4654, 'name': 'surya', 101: 2345, 'location': 'vja'}
type(d.get('name'))
```

```
<class 'str'>
type(d['location'])
<class 'str'>
d
{'id': 4654, 'name': 'surya', 101: 2345, 'location': 'vja'}
d.setdefault('gender':'male')
SyntaxError: invalid syntax
d.setdefault('gender')
d
{'id': 4654, 'name': 'surya', 101: 2345, 'location': 'vja', 'gender': None}
d.keys()
dict keys(['id', 'name', 101, 'location', 'gender'])
d.update({'gender':'male'})
d
{'id': 4654, 'name': 'surya', 101: 2345, 'location': 'vja', 'gender': 'male'}
d.update({'gender':'female','dept':'cse'})
d
{'id': 4654, 'name': 'surya', 101: 2345, 'location': 'vja', 'gender': 'female', 'dept':
'cse'}
d.setdefault('dept')
'cse'
d
{'id': 4654, 'name': 'surya', 101: 2345, 'location': 'vja', 'gender': 'female', 'dept':
'cse'}
d.pop(101)
2345
```

```
d.popitem()
...
('dept', 'cse')
>>> d
...
{'id': 4654, 'name': 'surya', 'location': 'vja', 'gender': 'female'}
>>> d.keys()
...
dict_keys(['id', 'name', 'location', 'gender'])
>>> type(d.keys())
...
<class 'dict_keys'>
>>> d.values()
...
dict_values([4654, 'surya', 'vja', 'female'])
>>> type(d.values()
...
<class 'dict_values()</pre>
```