

1. The structure of "game" package is shown below. Note the all `__init__.py` files in this package is empty.

```
game/  
  __init__.py  
  sound/  
    __init__.py  
    echo.py  
    wav.py  
  graphic/  
    __init__.py  
    screen.py  
    render.py  
  play/  
    __init__.py  
    run.py  
    test.py
```

Suppose you want to access the function `echo_test()` which is included in the `echo` module. Find out which one of the following is wrong and briefly explain why.

- ①

```
>>> from game.sound import echo  
>>> echo.echo_test()
```
- ②

```
>>> from game.sound.echo import echo_test  
>>> echo_test()
```
- ③

```
>>> import game  
>>> game.sound.echo.echo_test()
```
- ④

```
>>> import game.sound.echo  
>>> game.sound.echo.echo_test()
```

2. Explain why the first element of `abc` is 10, not 10.2345.

```
>>> import numpy as np  
>>> abc = np.arange(5)  
>>> abc[0] = 10.2345  
>>> abc  
array([10,  1,  2,  3,  4])
```

3. Explain why `rmat2` is one-dimensional, not two-dimensional.

```
>>> np.random.seed(1)
>>> rmat=np.random.randint(10, size=(3,4))
>>> rmat2=rmat[0]
array([5, 8, 9, 5])
```

4. Explain why the error occurs in the following expression.

```
>>> import numpy as np
>>> a=np.arange(15).reshape(3, 5)
>>> b=np.arange(3)
>>> np.hstack([a,b])
```

5. Briefly explain why the error occurs in the following expression.

```
>>> import numpy as np
>>> a=np.arange(15).reshape(3, 5)
>>> b=np.arange(3)
>>> a + b[np.newaxis,:]
```