

**Problem:**

Problem School Performance

Note: You are to create 4 separate python files for this task:

- performer.py(base class)
- singer.py(sub class)
- dancer.py(sub class)
- test\_class.py – following the required test cases

File 1: **perform.py**

Source code:

```
1 class Performer:
2     def __init__(self, name: str, age: int):
3         self.name = name
4         self.age = age
5
6     def get_name(self) -> str:
7         return self.name
8
9     def get_age(self) -> int:
10        return self.age
11
12
13
14
```

File 2: **singer.py**

Source Code:

```
1 from performer import Performer
2
3 class Singer(Performer):
4     def __init__(self, name: str, age: int, vocal_range: str):
5         super().__init__(name, age)
6         self.vocal_range = vocal_range
7
8     def get_vocal_range(self) -> str:
9         return self.vocal_range
10
11     def sing(self) -> None:
12         print(f"{self.name} is singing with a {self.vocal_range} range.")
13
```

### File 3: **dance.py**

Source Code:

```
1 from performer import Performer
2
3 class Dancer(Performer):
4     def __init__(self, name: str, age: int, dance_style: str):
5         super().__init__(name, age)
6         self.dance_style = dance_style
7
8     def get_dance_style(self) -> str:
9         return self.dance_style
10
11     def dance(self) -> None:
12         print(f"{self.name} is performing {self.dance_style} dance.")
13
```

### File 4: **test\_class.py**

Source Code:

```
1 from performer import Performer
2 from singer import Singer
3 from dancer import Dancer
4
5
6 p = Performer("John", 25)
7 print(p.get_name(), p.get_age())
8
9 d = Dancer("Emily", 28, "Ballet")
10 print(d.get_name(), d.get_age(), d.get_dance_style())
11
12 d.dance()
13
14 print(issubclass(Dancer, Performer))
15
16 s = Singer("Linda", 35, "Soprano")
17 print(s.get_name(), s.get_age(), s.get_vocal_range())
18
19 s.sing()
20
21
```

**Sample output:**

```
John 25
Emily 28 Ballet
Emily is performing Ballet dance.
True
Linda 35 Soprano
Linda is singing with a Soprano range.
```

```
** Process exited - Return Code: 0 **
```

```
[]
```