INHERITANCE

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

Code:

performer.py

```python
class Performer:
    def __init__(self, name: str, age: int):
        self._name = name
        self._age = age


    def get_name(self) -> str:
        return self._name


    def get_age(self) -> int:
        return self._age


    def display_info(self) -> None:
        print(f"{self.get_name()} {self.get_age()} ")
```

singer.py

```python
from performer import Performer


class Singer(Performer):
    def __init__(self, name: str, age: int, vocal_range: str):
        super().__init__(name, age)
        self._vocal_range = vocal_range


    def get_vocal_range(self) -> str:
        return self._vocal_range


    def sing(self) -> None:
        print(f"{self.get_name()} is singing with a {self.get_vocal_range()} range.")
```

dancer.py

```python
from performer import Performer


class Dancer(Performer):
    def __init__(self, name: str, age: int, dance_style: str):
        super().__init__(name, age)
        self._dance_style = dance_style


    def get_dance_style(self) -> str:
        return self._dance_style


    def dance(self) -> None:
        print(f"{self.get_name()} is performing {self.get_dance_style()} dance.")
```

test_class.py

```python
from performer import Performer
from singer import Singer
from dancer import Dancer


def test_performer():
    performer = Performer("John", 25)
    performer.display_info()


def test_dancer():
    dancer = Dancer("Emily", 28, "Ballet")
    print(f"{dancer.get_name()} {dancer.get_age()} {dancer.get_dance_style()}")
    dancer.dance()


def test_singer():
    singer = Singer("Linda", 35, "Soprano")
    print(f"{singer.get_name()} {singer.get_age()} {singer.get_vocal_range()}")
    singer.sing()
if __name__ == "__main__":
    test_performer()
    test_dancer()
    test_singer()
```

SAMPLE OUTPUT:

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