



██████████ ██████████: ██████████ - ██████████

██████████ ██████████

```
from dataclasses import dataclass
```

```
@dataclass
class Postavshik:
    id_postavshika: int
    naimenovanie: str
```

```
@dataclass
class Detal:
    id_detali: int
    naimenovanie: str
    stoitmost: float
    id_postavshika: int
```

```
@dataclass
class PostavshikDetal:
    id_postavshika: int
    id_detali: int
```

```
postavshiki = [
    Postavshik(1, "██████████ ██████████"),
    Postavshik(2, "██████████ - ██████████ ██████████"),
    Postavshik(3, "██████████ ██████████"),
    Postavshik(4, "██████████ ██████████"),
    Postavshik(5, "██████████ ██████████ ██████████")
]
```

```
detali = [
    Detal(1, "██████████", 1250.50, 1),
    Detal(2, "██████████", 890.00, 1),
    Detal(3, "██████████", 340.75, 1),
    Detal(4, "██████████", 1560.00, 2),
    Detal(5, "██████████", 2100.25, 2),
    Detal(6, "██████████", 980.00, 3),
    Detal(7, "██████████", 15.50, 3),
    Detal(8, "██████████", 250.00, 3),
    Detal(9, "██████████", 120.00, 5),
    Detal(10, "██████████", 1850.00, 5)
]
```

```
svyazi_postavshik_detal = [
    PostavshikDetal(1, 1), PostavshikDetal(1, 2), PostavshikDetal(1, 3),
    PostavshikDetal(2, 4), PostavshikDetal(2, 5), PostavshikDetal(3, 6),
    PostavshikDetal(3, 7), PostavshikDetal(3, 8), PostavshikDetal(5, 9),
    PostavshikDetal(5, 10), PostavshikDetal(2, 6), PostavshikDetal(3, 1),
    PostavshikDetal(4, 2)
]
```

```
def zapros1():
    print("\n" + "=" * 80)
    print("1: ██████████ ██████████ ██████████ (██████████-██████████)")
    print("=" * 80)
    rezultat = sorted([(d, p) for p in postavshiki for d in detali
                      if d.id_postavshika == p.id_postavshika],
                      key=lambda x: (x[1].id_postavshika, x[0].naimenovanie))
    for d, p in rezultat:
        print(f"██████████: {p.naimenovanie}<35} | ██████████: {d.naimenovanie}<25} | ██████████: {d.stoitmost}")
    return rezultat
```

```
def zapros2():
    print("\n" + "=" * 80)
    print("2: ██████████ ██████████ ██████████ ██████████")
    print("=" * 80)
```



```
zapros2()
zapros3()

print("\n" + "=" * 80)
print("======" + "=====")
print("==" * 80)

output_text = output_buffer.getvalue()
sys.stdout = old_stdout
print(output_text)
sozdat pdf(output_text,    file  )
```