

Started on	Tuesday, 28 March 2023, 7:48 PM
State	Finished
Completed on	Tuesday, 28 March 2023, 7:50 PM
Time taken	1 min 25 secs
Grade	90.00 out of 90.00 (100%)

Question **1**  
Correct  
Mark 15.00 out of 15.00

Write the exact text printed to standard output by the following program?

```
struct B {
    B() { std::cout << "B1"; }
    B(int n) { std:: cout << "B2" << n; }
};

struct D : public B {
    D() { std::cout << "D1"; }
    D(int n) {
        b = B(-n);
        std::cout << "D2"<< n;
    }
private:
    B b;
};

int main() {
    D d(4);
}
```

Answer:  ✓

The correct answer is: B1B1B2-4D24

Question **2**  
Correct  
Mark 15.00 out of 15.00

Write the exact text printed to standard output by the following program?

```
struct B {
    B() { std::cout << "B1"; }
    B(int n) { std:: cout << "B2" << n; }
};

struct D : public B {
    D() { std::cout << "D1"; }
    D(int n) : B(n) {
        b = B(-n);
        std::cout << "D2"<< n;
    }
private:
    B b;
};

int main() {
    D d(3);
}
```

Answer:  ✓

The correct answer is: B23B1B2-3D23

Question **3**

Correct

Mark 15.00 out of 15.00

Write the exact text printed to standard output by the following program?

```
struct B {
    B() { std::cout << "B1"; }
    B(int n) { std:: cout << "B2" << n; }
    ~B() { std::cout << "B3"; }
};

struct D : public B {
    D() { std::cout << "D1"; }
    D(int n) : B(n), b(-n) {
        std::cout << "D2"<< n;
    }
    ~D() { std::cout << "D3"; }
private:
    B b;
};

int main() {
    D *pd = new D(3);
    delete pd;
}
```

Answer:  

The correct answer is: B23B2-3D23D3B3B3

Question **4**

Correct

Mark 15.00 out of 15.00

Write the exact text printed to standard output by the following program?

```
struct B {
    B() { std::cout << "B1"; }
    B(int n) { std:: cout << "B2" << n; }
    ~B() { std::cout << "B3"; }
};

struct D : public B {
    D() { std::cout << "D1"; }
    D(int n) : B(n), b(-n) {
        std::cout << "D2"<< n;
    }
    ~D() { std::cout << "D3"; }
private:
    B b;
};

int main() {
    B *pd = new D(3);
    delete pd;
}
```

Answer:  

The correct answer is: B23B2-3D23B3

Question **5**

Correct

Mark 15.00 out of 15.00

Write the exact text printed to standard output by the following program?

```
struct B {
    B() { std::cout << "B1"; }
    B(int n) { std::cout << "B2" << n; }
    virtual ~B() { std::cout << "B3"; }
};

struct D : public B {
    D() { std::cout << "D1"; }
    D(int n) : B(n), b(-n) {
        std::cout << "D2"<< n;
    }
    ~D() { std::cout << "D3"; }
private:
    B b;
};

int main() {
    B *pd = new D(3);
    delete pd;
}
```

Answer:  

The correct answer is: B23B2-3D23D3B3B3

Question **6**

Correct

Mark 15.00 out of 15.00

Write the exact text printed to standard output by the following program?

```
struct B {
    B() {}
    virtual void p() const { std::cout << "B1"; }
    void q() const { std::cout << "B2"; }
};

struct D : public B {
    D() {}
    void p() const { std::cout << "D1"; }
    void q() const { std::cout << "D2"; }
};

int main() {
    B b, *pb = new B, *pd = new D;
    D d, *pd2 = new D;
    b.p();    b.q();
    d.p();    d.q();
    pb->p();  pb->q();
    pd->p();  pd->q();
    pd2->p(); pd2->q();
}
```

Answer:  

The correct answer is: B1B2D1D2B1B2D1B2D1D2