

## C++ Programming Assignment - 28

Draw object layout of below code snippets and explain its internal working in detail.

```
1. class base
{
    public :
    int i;
    float f;
    double d;

    void fun()
    {}

    void gun()
    {}
};

class derived : public base
{
    public :
    int i;
    double d;

    void sun()
    {}

    void fun()
    {}
};

int main()
{
    base bobj;
    derived dobj;

    return 0;
}
```

```
2. class base1
{
    public :
        int i;
        float f;

    void gun()
    {}
};

class base2
{
    public :
        int j;
        float g;

    void fun()
    {}
};

class derived : public base1, base2
{
    public :
        int i;
        double d;

    void sun()
    {}

    void fun()
    {}
};

int main()
{
    derived dobj;

    return 0;
}
```

```
3.  class base
    {
        public :
            int i;
            float f;

            void fun()           // 1000
            {}

            virtual void gun()   // 2000
            {}
    };

    class derived : public base
    {
        public :
            int i;
            double d;

            virtual void fun()    // 3000
            {}

            void gun()           // 4000
            {}

            virtual void sun()    // 5000
            {}
    };

    int main()
    {
        derived dobj;

        return 0;
    }
```

```
4. class base
{
    public :
        int i;
        float f;

        virtual void fun()        // 1000
        {}

        virtual void gun()        // 2000
        {}

        virtual void sun()        // 3000
        {}

        void run()                // 4000
        {}
};

class derived : public base
{
    public :
        int i;
        double d;

        virtual void fun()        // 5000
        {}

        virtual void gun()        // 6000
        {}

        void sun()                // 7000
        {}

        virtual void run()        // 8000
        {}
};

int main()
{
    derived dobj;

    return 0;
}
```

```
5.  class base
    {
        public :
            int i;
            float f;

            void gun()                // 1000
            {}

            virtual void sun()        // 2000
            {}
    };

    class derived : public base
    {
        public :
            int i;
            double d;

            virtual void fun()         // 3000
            {}

            void gun()                 // 4000
            {}

            virtual void sun()         // 5000
            {}
    };

    int main()
    {
        derived dobj;

        return 0;
    }
```