Objective:

- The purpose of this quiz is to focus on the very basic fundamental concepts learned so far in previous lectures.

Question: Give output of the following code segments. **(**2, 2, 3, 3, 3, 3, 4**)**

Part-A

```
enum day {sunday = 1, monday, tuesday = 5,
    wednesday, thursday = 10, friday,
saturday};

int main()
{
    cout<<sunday<<monday<<tuesday<<

wednesday<<thursday<<friday<<saturday;
    return 0;
}
```

Answer:

Part-B

```
enum state  {working, failed};
enum result {failed, passed};

int main()
{
    cout<<working;
    return 0;
}
```

Answer:

Part-C

```
class Base
{
public:
    virtual void show() { cout<<" In Base
\n"; }
};

class Derived: public Base
{
public:
    void show() { cout<<"In Derived \n"; }
};

int main(void)
{
    Base *bp = new Derived;
    bp->show();

    Base &br = *bp;
    br.show();

    return 0;
}
```

Answer:

Part-D

```
class Base
{
public:
    virtual void show() { cout<<" In Base
\n"; }
};

class Derived: public Base
{
public:
    void show() { cout<<"In Derived \n"; }
};

int main(void)
{
    Base *bp, b;
    Derived d;
    bp = &d;
    bp->show();
    bp = &b;
    bp->show();
    return 0;
}
```

Answer:

Part-E

```
class Base {
private:
    ~Base() {}
};
int main() {
    Base b;
    new Base;
    return 0;
}
```

Answer:

A. Line Base b will produce an syntax error

B. Line new Base will produce a syntax error

C. Both Lines Base b and new Base will produce syntax error

D. Code if fine

Part-F

```
class X
{
public:
    virtual void fun();
};


class Y
{
public:
    void fun();
};

int main()
{
    int a = sizeof(X), b = sizeof(Y);
    if (a == b) cout << "a == b";
    else if (a > b) cout << "a > b";
    else cout << "a < b";
    return 0;
}
```

Answer:

Part-G

```
class A
{
public:
    A()
    {cout<<"\nA()";}
    A(int)
    {cout<<"\nA(int)";}
    int a;
    void f() {cout<<"\nA::f";}
    virtual void z()=0;
    virtual void x()=0;

};
class B:  virtual public A
{
public:
    B()
    {cout<<"\nB()";}
    B(int)
    {cout<<"\nB(int)";}
    int b;
    void g() {cout<<"\nB::f";}
    virtual void z() {cout<<"\nB::z";}
};
class C:  virtual public A
{
public:
    C():A(12)
    {cout<<"\nC()";}
    C(int)
    {cout<<"\nC(int)";}
    int c;
    void h() {cout<<"\nC::h";}
    virtual void x() {cout<<"\nC::x";}
};
class D:  public B,  public C, virtual A
{
public:
    D()
    {cout<<"\nD()";}
    D(int):A(11)
    {cout<<"\nD(int)";}
    int d;
    void i() {cout<<"\nD::i";}
};

int main()
{
    D obj;
    D obj2(34);
    return 1;
}
```

Answer: