```
1.  class sample
2.  {
3.      public int i;
4.      public int j;
5.      public void fun(int i, int j)
6.      {
7.          this.i = i;
8.          this.j = j;
9.      }
10. }
11. class Program
12. {
13.     static void Main(string[] args)
14.     {
15.         sample s = new sample();
16.         s.i = 1;
17.         s.j = 2;
18.         s.fun(s.i, s.j);
19.         Console.WriteLine(s.i + " " + s.j);
20.         Console.ReadLine();
21.     }
22. }
```

a) Error while calling s.fun() due to inaccessible level
b) Error as ‘this’ reference would not be able to call ‘i’ and ‘j’
c) 1 2
d) Runs successfully but prints nothing

```
1.  class sample
2.  {
3.      public int i;
4.      public int[] arr = new int[10];
5.      public void fun(int i, int val)
6.      {
7.          arr[i] = val;
8.      }
9.  }
10. class Program
11. {
12.     static void Main(string[] args)
13.     {
14.         sample s = new sample();
15.         s.i = 10;
16.         sample.fun(1, 5);
17.         s.fun(1, 5);
18.         Console.ReadLine();
19.     }
20. }
```

a) sample.fun(1, 5) will not work correctly
b) s.i = 10 cannot work as i is ‘public’
c) sample.fun(1, 5) will set value as 5 in arr[1]
d) s.fun(1, 5) will work correctly

8. What will be the output of the following C# code?

```
1.   class z
2.   {
3.       public int X;
4.       public int Y;
5.       public  const int c1 = 5;
6.       public  const int c2 = c1 * 25;
7.       public void set(int a, int b)
8.       {
9.           X = a;
10.          Y = b;
11.      }
12.
13.  }
14.  class Program
15.  {
16.      static void Main(string[] args)
17.      {
18.          z s = new z();
19.          s.set(10, 20);
20.          Console.WriteLine(s.X + " " + s.Y);
21.          Console.WriteLine(z.c1 + " " + z.c2);
22.          Console.ReadLine();
23.      }
24.   }
```

a)

```
10 20
5  25
```

b)

```
20 10
25 5
```

c)

```
10 20
5 125
```

d)

```
20 10
125 5
```

13. What will be the output of the following C# code?

```
1.    class test
2.    {
3.        public void print()
4.        {
5.            Console.WriteLine("Csharp:");
6.        }
7.    }
8.    class Program
9.    {
10.       static void Main(string[] args)
11.       {
12.           test t;
13.           t.print();
14.           Console.ReadLine();
15.       }
16.   }
```

a) Code runs successfully prints nothing
b) Code runs and prints “Csharp”
c) Syntax error as t is unassigned variable which is never used
d) None of the mentioned

11. What will be the output of the following C# code?

```
1.    class z
2.    {
3.        public string name1;
4.        public string address;
5.        public void show()
6.        {
7.            Console.WriteLine("{0} is in city{1}"
8.        }
9.    }
10.   class Program
11.   {
12.       static void Main(string[] args)
13.       {
14.           z n = new z();
15.           n.name1 = "harsh";
16.           n.address = "new delhi";
17.           n.show();
18.           Console.ReadLine();
19.       }
20.   }
```

a) Syntax error
b) {0} is in city{1} harsh new delhi
c) harsh is in new delhi
d) Run successfully prints nothing

8. What will be the output of the following C# code?

```
1.  class abc
2.  {
3.      public static void a()
4.      {
5.          console.writeline("first method");
6.      }
7.      public void b()
8.      {
9.          a();
10.         console.writeline("second method");
11.     }
12.     public void b(int i)
13.     {
14.         console.writeline(i);
15.         b();
16.     }
17. }
18. class program
19. {
20.     static void main()
21.     {
22.         abc k = new abc();
23.         abc.a();
24.         k.b(20);
25.     }
26. }
```

second method
20
second method
first method

b)

first method
20
first method
second method

c)

first method
20

d)

second method
20
first method

```
class maths
{
    public int length;
    public int breadth;
    public  maths(int x)
    {
        length = x + 1;
    }
    public maths(int x, int y)
    {
        length = x + 2;
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths m = new maths(6);
        maths k = new maths(6, 2);
        Console.WriteLine(m.length);
        Console.WriteLine(k.length);
        Console.ReadLine();
    }
}
```

a) 8, 8
b) 0, 2
c) 8, 10
d) 7, 8

```
{
    public int length;
    public int breadth;
    public maths(int x, int y)
    {
        length = x;
        breadth = y;
        Console.WriteLine(x + y);
    }
    public maths(double x, int y)
    {
        length = (int)x;
        breadth = y;
        Console.WriteLine(x * y);
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths m = new maths(20, 40);
        maths k = new maths(12.0, 12);
        Console.ReadLine();
    }
}
```

a) 60, 24
b) 60, 0
c) 60, 144
d) 60, 144.0

3. What will be the output of the following C# code?

```
class maths
{
    public maths()
    {
        Console.WriteLine("constructor 1 :");
    }
    public maths(int x)
    {
        int p = 2;
        int u;
        u = p + x;
        Console.WriteLine("constructor 2: " +u);
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths k = new maths(4);
        maths t = new maths();
        Console.ReadLine();
    }
}
```

constructor 1:
constructor 2: 6

b)

constructor 2: 6
constructor 2: 6

c)

constructor 2: 6
constructor 1:

d) none of the mentioned

```
class maths
{
    int i;
    public maths(int ii)
    {
        ii = 12;
        int j = 12;
        int r = ii * j;
        Console.WriteLine(r);
    }
}
class maths1 : maths
{
    public maths1(int u) :base(u)
    {
        u = 13;
        int h = 13;
        Console.WriteLine(u + h);
    }
}
class maths2 : maths1
{
    public maths2(int k) :base(k)
    {
        k = 24;
        int o = 6 ;
        Console.WriteLine(k /o);
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths2 t = new maths2(10);
        Console.ReadLine();
    }
}
```

a) 4, 26, 144
b) 26, 4, 144
c) 144, 26, 4
d) 0, 0, 0

```
class maths
{
    static maths()
    {
        int s = 8;
        Console.WriteLine(s);
    }
    public  maths(int f)
    {
        int h = 10;
        Console.WriteLine(h);
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths p = new maths(0);
        Console.ReadLine();
    }
}
```

a) 10, 10
b) 0, 10
c) 8, 10
d) 8, 8

4. What will be the output of the following C# code?

```
1.  class overload
2.  {
3.      public int x;
4.      int y;
5.      public int add(int a)
6.      {
7.          x = a + 1;
8.          return x;
9.      }
10.     public int add(int a, int b)
11.     {
12.         x = a + 2;
13.         return x;
14.     }
15. }
16. class Program
17. {
18.     static void Main(string[] args)
19.     {
20.         overload obj = new overload();
21.         overload obj1 = new overload();
22.         int a = 0;
23.         obj.add(6);
24.         obj1.add(6, 2);
25.         Console.WriteLine(obj.x);
26.         Console.WriteLine(obj1.x);
27.         Console.ReadLine();
28.     }
29. }
```

```
8
8
```

b)

```
0
2
```

c)

```
8
10
```

d)

```
7
8
```

```
class maths
{
    public int x;
    public double y;
    public int add(int a, int b)
    {
        x = a + b;
        return x;
    }
    public int add(double c, double d)
    {
        y = c + d;
        return (int)y;
    }
    public maths()
    {
        this.x = 0;
        this.y = 0;
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths obj = new maths();
        int a = 4;
        double b = 3.5;
        obj.add(a, a);
        obj.add(b, b);
        Console.WriteLine(obj.x + " " + obj.y);
        Console.ReadLine();
    }
}
```

a) 4, 3.5
b) 8, 0
c) 7.5, 8
d) 8, 7

```
class maths
{
    public int fun(int k, int y)
    {
        return k + y;
    }
    public int fun1(int t, float z)
    {
        return (t+(int)z);
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths obj = new maths();
        int i;
        int b = 90;
        int c = 100;
        int d = 12;
        float l = 14.78f;
        i = obj.fun(b, c);
        Console.WriteLine(i);
        int j = (obj.fun1(d,  l));
        Console.WriteLine(j);
        Console.ReadLine();
    }
}
```

a) 190, 26.78f
b) 0, 26.78f
c) 190, 26
d) 190, 0

7. What will be the output of the following C# code?

```
1.  class maths
2.  {
3.      public static void fun1()
4.      {
5.          Console.WriteLine("method 1 :");
6.      }
7.      public void fun2()
8.      {
9.          fun1();
10.         Console.WriteLine("method 2 :");
11.     }
12.     public void fun2(int k)
13.     {
14.         Console.WriteLine(k);
15.         fun2();
16.     }
17. }
18. class Program
19. {
20.     static void Main(string[] args)
21.     {
22.         maths obj = new maths();
23.         maths.fun1();
24.         obj.fun2(20);
25.         Console.ReadLine();
26.     }
27. }
```

a)

```
method 1:
method 2:
20
method 1:
```

b)

```
method 2:
20
method 1:
method 1:
```

c)

```
method 1:
0
method 2:
method 2:
```

d)

```
method 1:
20
method 1:
method 2:
```

9. What will be the output of the following C# code?

```
1.  class maths
2.  {
3.      public int fun1(int k)
4.      {
5.          k = 20;
6.          return k;
7.      }
8.      public Single fun1(float t)
9.      {
10.         t = 3.4f;
11.         return t;
12.     }
13. }
14. class Program
15. {
16.     static void Main(string[] args)
17.     {
18.         maths obj = new maths();
19.         int i;
20.         i = obj.fun1(30);
21.         Console.WriteLine(i);
22.         Single j;
23.         j = obj.fun1(2.5f);
24.         Console.WriteLine(j);
25.         Console.ReadLine();
26.     }
27. }
```

a)

```
30
2.5f
```

b)

```
2.5f
30
```

c)

```
20
2.5f
```

d)

```
20
3.4f
```

11. What will be the output of the following C# code?

```
1.  class maths
2.  {
3.      public int fun(int k, int y, int n)
4.      {
5.          Console.WriteLine(k + "  " + y + "  "
6.          return (k);
7.      }
8.      public int fun1(int t,float z)
9.      {
10.         Console.WriteLine(t + "  " + z);
11.         return t;
12.     }
13. }
14. class Program
15. {
16.     static void Main(string[] args)
17.     {
18.         maths obj = new maths();
19.         int b = 90;
20.         int c = 100;
21.         int d ;
22.         float l;
23.         int i = obj.fun(b, c, 12);
24.         int j = (obj.fun1(12, 14.78f));
25.         Console.ReadLine();
26.     }
27. }
```

a)

```
0, 0, 0
12, 14.78
```

b)

```
0, 0, 0
0, 0
```

c)

```
90, 100, 12
12, 14
```

d)

```
90, 100, 12
12, 14.78
```

```
class maths
{
    public int fun(int ii)
    {
        return(ii > 0 ? ii :ii * -1);
    }
    public long fun(long ll)
    {
        return(ll > 0 ? ll :ll * -1);
    }
    public double fun( double dd)
    {
        return(dd > 0 ? dd :dd * -1);
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths obj = new maths();
        int i = -25;
        int j ;
        long l = -100000l ;
        long m;
        double d = -12.34;
        double e;
        j = obj.fun(i);
        m = obj.fun(l);
        e = obj.fun(d);
        Console.WriteLine(j + "  " + m + "  "
        Console.ReadLine();
    }
}
```

a) 1 1 1
b) 0 0 0
c) 25 100000 12.34
d) -25 -100000 -12.34

```
class A
{
    public int i;
    public void display()
    {
        Console.WriteLine(i);
    }
}
class B: A
{
    public int j;
    public void display()
    {
        Console.WriteLine(j);
    }
}
class Program
{
    static void Main(string[] args)
    {
        B obj = new B();
        obj.i = 1;
        obj.j = 2;
        obj.display();
        Console.ReadLine();
    }
}
```

a) 0
b) 2
c) 1
d) Compile time error

```
class A
{
    public virtual void display()
    {
        Console.WriteLine("A");
    }
}
class B: A
{
   public override void display()
   {
       Console.WriteLine(" B ");
   }
}
class Program
{
   static void Main(string[] args)
   {
       A obj1 = new A();
       B obj2 = new B();
       A r;
       r = obj1;
       r.display();
       r = obj2;
       r.display();
       Console.ReadLine();
   }
}
```

a) A, A
b) B, B
c) Compile time error
d) A, B

```
class a
{
    public  void fun()
    {
        Console.WriteLine("base method");
    }
}
class b: a
{
    public new void fun()
    {
        Console.WriteLine(" derived method ");
    }
}
class Program
{
    static void Main(string[] args)
    {
        b k = new b();
        k.fun();
        Console.ReadLine();
    }
}
```

a) Base method
b) Derived method
c) Code runs successfully prints nothing
d) Compile time error

```
2.  {
3.      public  int i;
4.      void display()
5.      {
6.          Console.WriteLine(i);
7.      }
8.  }
9.  class sample1 : sample
10. {
11.     public  int j;
12.     public void display()
13.     {
14.         Console.WriteLine(j);
15.     }
16. }
17. class Program
18. {
19.     static void Main(string[] args)
20.     {
21.         sample1 obj = new sample1();
22.         obj.i = 1;
23.         obj.j = 2;
24.         obj.display();
25.         Console.ReadLine();
26.     }
27. }
```

a) 1
b) 3
c) 2
d) Compile Time error

```
1.  class a
2.  {
3.
4.
5.
6.  }
7.  class b : a
8.  {
9.      variable declaration;
10.     method declaration;
11. }
```

a) Declaration of a base class
b) Declaration of a subclass
c) Declaration of base class & subclass and how subclass inherits the base class
d) None of the mentioned

```
1. class sample
2. {
3.     protected int index;
4.     public sample()
5.     {
6.         index = 0;
7.     }
8. }
9. class sample 1: sample
10. {
11.     public void add()
12.     {
13.         index += 1;
14.     }
15. }
16. class Program
17. {
18.     static void Main(string[] args)
19.     {
20.         sample 1 z = new sample 1();
21.         z . add();
22.     }
23. }
```

a) Index should be declared as protected if it is to become available in inheritance chain
b) Constructor of sample class does not get inherited in sample 1 class
c) During constructing an object referred to by z, Firstly constructor of sample class will be called followed by constructor of sample 1 class
d) All of the mentioned

5. What will be the output of the following C# code?

```
1. class sample
2. {
3.     public sample()
4.     {
5.         Console.WriteLine("THIS IS BASE CLASS c
6.     }
7.  }
8. public class sample1 : sample
9. {
10.
11. }
12. class Program
13. {
14.     static void Main(string[] args)
15.     {
16.         sample1 obj = new sample1();
17.         Console.ReadLine();
18.     }
19. }
```

a) Code executes successfully prints nothing
b) This is base class constructor
c) Compile time error
d) None of the mentioned

```
1.  class sample
2.  {
3.      int i = 10;
4.      int j = 20;
5.      public void display()
6.      {
7.          Console.WriteLine("base method ");
8.      }
9.  }
10. class sample1 : sample
11. {
12.     public  int s = 30;
13. }
14. class Program
15. {
16.     static void Main(string[] args)
17.     {
18.         sample1 obj = new sample1();
19.         Console.WriteLine("{0}, {1}, {2}", obj
20.         obj.display();
21.         Console.ReadLine();
22.     }
23. }
```

10, 20, 30
base method

b) 10, 20, 0
c) compile time error
d) base method

```
1.  class baseclass
2.  {
3.      int a;
4.      public baseclass(int a1)
5.      {
6.          a = a1;
7.          console.writeline(" a ");
8.      }
9.      class derivedclass : baseclass
10.     {
11.         public derivedclass (int a1) : base(a1
12.         {
13.             console.writeline(" b ");
14.         }
15.     }
16.     class program
17.     {
18.         static void main(string[] args)
19.         {
20.             derivedclass d =  new derivedclass
21.         }
22.     }
23. }
```

a) Compile time error
b)

```
b
a
```

c)

```
a
b
```

d) The program will work correctly if we replace base(a1) with base.baseclass(a1)

function a() of class y to get output “i love csharp”?

```
1.  class x
2.  {
3.      public void a()
4.      {
5.          console.write("bye");
6.      }
7.  }
8.  class y : x
9.  {
10.     public void a()
11.     {
12.     /* add statement here */
13.         console.writeline("  i love csharp ");
14.     }
15. }
16. class program
17. {
18.     static void main(string[] args)
19.     {
20.         y obj =  new obj();
21.         obj.a();
22.     }
23. }
```

a) x.a();
b) a();
c) base.a();
d) x::a();

```
1. class A
2. {
3.     public int i;
4.     protected int j;
5. }
6. class B : A
7. {
8.     public int j;
9.     public void display()
10.    {
11.        base.j = 3;
12.        Console.WriteLine(i + " " + j);
13.    }
14. }
15. class Program
16. {
17.    static void Main(string[] args)
18.    {
19.        B obj = new B();
20.        obj.i = 1;
21.        obj.j = 2;
22.        obj.display();
23.        Console.ReadLine();
24.    }
25. }
```

a) 2 1
b) 1 0
c) 0 2
d) 1 2

```
1.  class A
2.  {
3.      public int i;
4.      private int j;
5.  }
6.  class B :A
7.  {
8.      void display()
9.      {
10.         base.j = base.i + 1;
11.         Console.WriteLine(base.i + "  " + base.j
12.     }
13. }
14. class Program
15. {
16.     static void Main(string[] args)
17.     {
18.         B obj = new B();
19.         obj.i = 1;
20.         obj.j = 2;
21.         obj.display();
22.         Console.ReadLine();
23.     }
24. }
```

a) 1, 3
b) 2, 3
c) 1, 2
d) compile time error

```
2.  public class BaseClass
3.  {
4.      public BaseClass()
5.      {
6.          Console.WriteLine("I am a base class");
7.      }
8.  }
9.  public class ChildClass : BaseClass
10. {
11.     public ChildClass()
12.     {
13.         Console.WriteLine ("I am a child class
14.     }
15. static void Main()
16. {
17.     ChildClass CC = new ChildClass();
18. }
19. }
```

a)

```
I am a base class
I am a child class
```

b)

```
I am a child class
I am a base class
```

c) Compile time error
d) None of the mentioned

```
1.  namespace ConsoleApplication4
2.  {
3.      abstract class A
4.      {
5.          int i;
6.          public  abstract void display();
7.      }
8.      class B: A
9.      {
10.         public  int j;
11.         public override void display()
12.         {
13.             Console.WriteLine(j);
14.         }
15.     }
16.     class Program
17.     {
18.         static void Main(string[] args)
19.         {
20.             B obj = new B();
21.             obj.j = 2;
22.             obj.display();
23.             Console.ReadLine();
24.         }
25.     }
26. }
```

a) 0
b) 2
c) Compile time error
d) 1

```
1.  namespace ConsoleApplication4
2.  {
3.      abstract class A
4.      {
5.          public int i ;
6.          public int j ;
7.          public abstract void display();
8.      }
9.      class B: A
10.     {
11.         public int j = 5;
12.         public override void display()
13.         {
14.             this.j = 3;
15.             Console.WriteLine(i + "  " + j);
16.         }
17.     }
18.     class Program
19.     {
20.         static void Main(string[] args)
21.         {
22.             B obj = new B();
23.             obj.i = 1;
24.             obj.display();
25.             Console.ReadLine();
26.         }
27.     }
28. }
```

a) 1, 5
b) 0, 5
c) 1, 0
d) 1, 3

```
1.  namespace ConsoleApplication4
2.  {
3.      public abstract class A
4.      {
5.          public int i = 7;
6.          public abstract void display();
7.      }
8.      class B: A
9.      {
10.         public int j;
11.         public override void display()
12.         {
13.             Console.WriteLine(i);
14.             Console.WriteLine(j);
15.         }
16.     }
17.     class Program
18.     {
19.         static void Main(string[] args)
20.         {
21.             B obj = new B();
22.             A obj1 = new B();
23.             obj.j = 1;
24.             obj1.i = 8;
25.             obj.display();
26.             Console.ReadLine();
27.         }
28.     }
29. }
```

a) 0, 8
b) 1, 8
c) 1, 7
d) 7, 1

6. What will be the output of the following C# code?

```
1. namespace ConsoleApplication4
2. {
3.     abstract class A
4.     {
5.         public int i;
6.         public abstract void display();
7.     }
8.     class B: A
9.     {
10.        public  int j;
11.        public int sum;
12.        public override void display()
13.        {
14.            sum = i + j;
15.            Console.WriteLine(+i + "\n" + +j);
16.            Console.WriteLine("sum is:" +sum);
17.        }
18.    }
19.    class Program
20.    {
21.        static void Main(string[] args)
22.        {
23.            A obj = new B();
24.            obj.i = 2;
25.            B obj1 = new B();
26.            obj1.j = 10;
27.            obj.display();
28.            Console.ReadLine();
29.        }
30.    }
31. }
```

a)

```
2, 10
12
```

b)

```
0, 10
10
```

c)

```
2, 0
2
```

d)

```
0, 0
0
```

```
class maths
{
    int i;
    public maths(int x)
    {
        i = x;
        Console.WriteLine(" hello: ");
    }
}
class maths1 : maths
{
    public  maths1(int x) :base(x)
    {
        Console.WriteLine("bye");
    }
}
class Program
{
    static void Main(string[] args)
    {
        maths1 k = new maths1(12);
        Console.ReadLine();
    }
}
```

a) hello bye
b) 12 hello
c) bye 12
d) Compile time error

```
namespace ConsoleApplication4
{
    class A
    {
        public int i;
        public void display()
        {
            Console.WriteLine(i);
        }
    }
    class B: A
    {
        public int j;
        public void display()
        {
            Console.WriteLine(j);
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            B obj = new B();
            obj.j = 1;
            obj.i = 8;
            obj.display();
            Console.ReadLine();
        }
    }
}
```

a) 8, 1
b) 8
c) 1
d) 1, 8