**1.** **#include <iostream>**

**using namespace std;**

**class empty{};**

**int main()**

**{**

**cout<<sizeof(empty);**

**return 0;**

**}**

**Ans: 1 or (any non zero value)**

**2. #include <iostream>**

**using namespace std;**

**namespace first{**

**int x=5;**

**int y=10;**

**}**

**namespace second{**

**double x=3.1416;**

**double y=2.7183;**

**}**

**int main()**

**{**

**using first::x;**

**using second::y;**

**bool a,b;**

**a=x>y;**

**b=first::y<second::x;**

**cout<<a<<b;**

**return 0;**

**}**

**Ans: 10**

**3. #include <iostream>**

**using namespace std;**

**int f(int p,int q){**

**if(p>q)**

**return p;**

**else**

**return q;**

**}**

**int main()**

**{**

**int a=5, b=10;**

**int k;**

**bool x=true;**

**bool y= f(a,b);**

**k=((a\*b)+(x+y));**

**cout<<k;**

**return 0;**

**}**

**Ans: 52**

**4.** **#include <iostream>**

**using namespace std;**

**int x=1;**

**void fun(){**

**int x=2;{**

**int x=3;**

**cout<<::x<<endl;**

**}**

**}**

**int main()**

**{**

**fun();**

**return 0;**

**}**

**Ans: 1**

**5. #include <iostream>**

**using namespace std;**

**#define PI 3.14159**

**int main()**

**{**

**float r=2;**

**float circle;**

**circle=2\*PI\*r;**

**cout<<circle;**

**return 0;**

**}**

**Ans: 12.5664**

**6. #include <iostream>**

**using namespace std;**

**namespace Box1{**

**int a=4;**

**}**

**namespace Box2{**

**int a=13;**

**}**

**int main()**

**{**

**int a=16;**

**Box1::a;**

**Box2::a;**

**cout<<a;**

**return 0;**

**}**

**Ans : 16**

**7. #include <iostream>**

**using namespace std;**

**int main()**

**{**

**int n;**

**for(n=5;n>0;n--){**

**cout<<n;**

**if(n==3)**

**break;**

**}**

**return 0;**

**}**

**Ans: 543**

**8. #include <iostream>**

**using namespace std;**

**int main()**

**{**

**int i;**

**for(i=0;i<10;i++);{**

**cout<<i;**

**}**

**return 0;**

**}**

**Ans: 10**

**9. #include <iostream>**

**using namespace std;**

**int main()**

**{**

**int a=10;**

**if(a<15){**

**time:**

**cout<<a;**

**goto time;**

**}**

**}**

**Ans: Infinitely print 10**

**10.** **#include <iostream>**

**using namespace std;**

**int main()**

**{**

**int i,j;**

**j=10;**

**i=(j++,j+100,999+j);**

**cout<<i;**

**return 0;**

**}**

**Ans: 1010**

**11.** **#include <iostream>**

**int main()**

**{**

**int a,b;**

**std::cin>>a>>b;**

**std::cout<<a+b;**

**return 0;**

**}**

**Ans: Addition of two numbers**

**12.** **#include <iostream>**

**using namespace std;**

**class Room{**

**public:**

**double length;**

**double breadth;**

**double height;**

**double calculateArea(){**

**return length\*breadth;**

**}**

**double calculateVolume(){**

**return length\*breadth\*height;**

**}**

**};**

**int main()**

**{**

**Room room1;**

**room1.length=4.5;**

**room1.breadth=3.8;**

**room1.height=9.2;**

**cout<<room1.calculateArea()<<" "<<room1.calculateVolume();**

**return 0;**

**}**

**Ans: 17.1 157.32**

**13. #include <iostream>**

**using namespace std;**

**class Mycpp{**

**};**

**int main()**

**{**

**Mycpp obj;**

**return 0;**

**}**

**Ans : Nothing would be printed**

**14. #include <iostream>**

**using namespace std;**

**int grades(int a=0, int b=0, int c){**

**return(a+b+c);**

**}**

**int main(){**

**cout<<grades(10);**

**return 0;**

**}**

**Ans: Compiler Error**

**15.** **#include <iostream>**

**using namespace std;**

**class A{**

**int x;**

**public:**

**void setX(int i){**

**x=i;**

**}**

**void print(){**

**cout<<x;**

**}**

**};**

**class B: public A{**

**public:**

**B(){**

**setX(10);**

**}**

**};**

**class C:public A{**

**public:**

**C(){**

**setX(20);**

**}**

**};**

**class D: public B,public C{**

**};**

**int main(){**

**D d;**

**d.print();**

**return 0;**

**}**

**Ans: Error**

**16.** **#include <iostream>**

**using namespace std;**

**int main(){**

**int arr[]={10,20,30,40,50};**

**int \*p=arr;**

**p+=3;**

**cout<<\*p;**

**return 0;**

**}**

**Ans: 40**

**17.** **#include <iostream>**

**using namespace std;**

**class student{**

**private:**

**int age;**

**public:**

**student(){**

**age=20;**

**}**

**student(int a){**

**age=a;**

**}**

**int getAge(){**

**return age;**

**}**

**};**

**int main(){**

**student stu1,stu2(25);**

**cout<<"student1 Age= "<<stu1.getAge()<<endl;**

**cout<<"student2 Age= "<<stu2.getAge()<<endl;**

**return 0;**

**}**

**Ans: student1 Age=20**

**student2 Age=25**

**18. #include <iostream>**

**using namespace std;**

**class Base{**

**int ABC;**

**};**

**class Derived1: Base{**

**};**

**class Derived2: Derived1{**

**};**

**int main(){**

**Derived2 D;**

**cout<<sizeof(D);**

**return 0;**

**}**

**Ans: 4**

**19.** **#include <iostream>**

**using namespace std;**

**class ABC{**

**private:**

**int x;**

**public:**

**ABC():x(10){}**

**void operator ++(){**

**x=x+2;**

**}**

**void Print(){**

**cout<<"count: "<<x;**

**}**

**};**

**int main(){**

**ABC obj;**

**++obj;**

**obj.Print();**

**return 0;**

**}**

**Ans: count: 12**