**Namespaces**

**Writer:** Sayak Haldar

Now, the theory part is discussed in Object Oriented Programming in c++ document.

**1. Which operator is used to signify the namespace?**

a) conditional operator

b) ternary operator

c) scope operator

d) none of the mentioned

**Answer: c**

**2. Identify the correct statement.**

a) Namespace is used to group class, objects and functions

b) Namespace is used to mark the beginning of the program

c) Namespace is used to separate the class, objects

d) None of the mentioned

**Answer: a**

Explanation: Namespace allow you to group class, objects and functions. It is used to divide the global scope into the sub-scopes.

**3. What is the use of Namespace?**

a) To encapsulate the data

b) To structure a program into logical units

c) Encapsulate the data & structure a program into logical units

d) None of the mentioned

**Answer: b**

Explanation: The main aim of the namespace is to understand the logical units of the program and to make the program so robust.

**4. What is the general syntax for accessing the namespace variable?**

a) namespaceid::operator

b) namespace,operator

c) namespace#operator

d) none of the mentioned

**Answer: a**

**5. What is the output of this program?**

#include <iostream>

using namespace std;

namespace first

{

int var = 5;

}

namespace second

{

double var = 3.1416;

}

int main ()

{

int a;

a = first::var + second::var;

cout << a;

return 0;

}

a) 8.31416

b) 8

c) 9

d) compile time error

**Answer: b**

Explanation: As we are getting two variables from namespace variable and we are adding that.

Now, first::var+second::var this value will be stored into a temporary double variable. And that double variable’s value will be necessarily trimmed off to store into int variable.  
  
The compiler could throw a warning about possible loss of precision.

Output:

$ g++ name.cpp

$ a.out

8

Now, I have a necessary question. Is rounding off/trimming off depends upon the compiler.

**6. What is the output of these program?**

#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;

}

a) 11

b) 01

c) 00

d) 10

**Answer: d**

Explanation: We are inter mixing the variable and comparing it which is bigger and smaller and according to that we are printing the output.

Output:

$ g++ name1.cpp

$ a.out

10

**7. What is the output of this program?**

#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;

}

a) 4

b) 13

c) 16

d) compile time error

**Answer: c**

Explanation: In this program, as there is lot of variable a and it is printing the value inside the block because it got the highest priority.

Output:

$ g++ name2.cpp

$ a.out

16

**8. What is the output of this program?**

#include <iostream>

using namespace std

namespace space

{

int x = 10;

}

namespace space

{

int y = 15;

}

int main(int argc, char \* argv[])

{

space::x = space::y =5;

cout << space::x << space::y;

}

a) 1015

b) 1510

c) 55

d) compile time error

**Answer: c**

Explanation: We are overriding the value at the main function and so we are getting the output as 55.

Output:

$ g++ name4.cpp

$ a.out

55

**9. What is the output of this program?**

#include <iostream>

using namespace std;

namespace extra

{

int i;

}

void i()

{

using namespace extra;

int i;

i = 9;

cout << i;

}

int main()

{

enum letter { i, j};

class i { letter j; };

::i();

return 0;

}

a) 9

b) 10

c) compile time error

d) none of the mentioned

**Answer: a**

Explanation: A scope resolution operator without a scope qualifier refers to the global namespace.

**10. Which keyword is used to access the variable in namespace?**

a) using

b) dynamic

c) const

d) static

**Answer: a**

**Note:** This document does not cover all aspects of the namespace. Like, you can define a class within namespace. You can declare a class within the namespace and define outside it. (there could be some good questions asked from it) These are just some mcqs. You could read the geeksforgeeks article about namespace:

<https://www.geeksforgeeks.org/namespace-in-c/>

If you are not reading conventional books for learning c++.