**2. Main Function, name spaces, comments**

This screen explains the entry point function Main() and how to add comments to the code in all the three programming languages.

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

* [**A.**](javascript:%20void(0)) conditional operator
* [**B.**](javascript:%20void(0)) ternary operator
* [**C.**](javascript:%20void(0))**scope operator**
* [**D.**](javascript:%20void(0)) none of the mentioned

2. Which of these keywords is used to define packages in Java?

* [**A.**](javascript:%20void(0)) pkg
* [**B.**](javascript:%20void(0)) Pkg
* [**C.**](javascript:%20void(0))**package**
* [**D.**](javascript:%20void(0)) Package

3. Which of the following is correct way of importing an entire package ‘pkg’?

* [**A.**](javascript:%20void(0)) import pkg.
* [**B.**](javascript:%20void(0)) Import pkg.
* [**C.**](javascript:%20void(0))**import pkg.\***
* [**D.**](javascript:%20void(0)) Import pkg.\*

4.What type is argv ?

* [**A.**](javascript:%20void(0))char\*
* [**B.**](javascript:%20void(0)) int
* [**C.**](javascript:%20void(0))**char\*\***
* [**D.**](javascript:%20void(0)) Its not a variable\

What type is argv?

* A. char \*
* B. int
* C. char \*\*
* D. It's not a variable
* 5. Which of the following is a correct comment?  
  A. \*/ Comments \*/  
  B. \*\* Comment \*\*  
  C. /\* Comment \*/  
  D. { Comment }

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**Datatypes**

This screen explains about the predefined and user defined datatypes available in all the three languages.

1.Give some examples for built in datatypes in C#?

Ans int

2. Which of the following are value types in C#? :

A Integer,

**B Array,**

C Single,

D string

3. Which is a valid keyword in java?

|  |  |
| --- | --- |
| [**A.**](javascript:%20void%200;) | **Interface** |
| [**B.**](javascript:%20void%200;) | String |
| [**C.**](javascript:%20void%200;) | Float |
|  | D. Unsigned  4. What is the implicit base class from which all value types derived?  System.Object  **System.ValueType**  System.Base  System  1 Evaluate !(1 && !(0 || 1)). A. True B. False C. Unevaluatable  ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++  2 what is the output for  class Main {  public static void main(String args[]) {  int t;  System.out.println(t);  }  }  A 0  B garbage value  C compiler error  D runtime error  3 Predict the output of following Java program.  class Test {  public static void main(String[] args) {  for(int i = 0; 0; i++)  {  System.out.println("Hello");  break;  }  }  }  A  Hello  B  Empty Output  Compiler error  D  Runtime error  +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++  **Input and Output :**  ‘cin’ is an \_\_  A - Class  **B - Object**  C - Package  D - Namespace |

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**5. Control statements**

All the different forms conditional and loops supported by the 3 languages is explained in the screen.

1.What does the following C#.NET code snippet will print?

int i = 0, j = 0;

label:

i++;

j+=i;

if (i < 10)

{

Console.Write(i +" ");

goto label;

}

|  |  |
| --- | --- |
| [**A.**](javascript:%20void%200;) | **Prints 1 to 9** |
| [**B.**](javascript:%20void%200;) | Prints 0 to 8 |
| [**C.**](javascript:%20void%200;) | Prints 2 to 8 |
| [**D.**](javascript:%20void%200;) | Prints 2 to 9 |
| [**E.**](javascript:%20void%200;) | Compile error at *label:*. |

2. public class While

{

public void loop()

{

int x= 0;

while ( 1 ) /\* Line 6 \*/

{

System.out.print("x plus one is " + (x + 1)); /\* Line 8 \*/

}

}

}

|  |
| --- |
| Which statement is true? |
| |  |  | | --- | --- | | [**A.**](javascript:%20void%200;) | There is a syntax error on line 1. | | [**B.**](javascript:%20void%200;) | There are syntax errors on lines 1 and 6. | | [**C.**](javascript:%20void%200;) | There are syntax errors on lines 1, 6, and 8. | | [**D.**](javascript:%20void%200;) | **There is a syntax error on line 6.**  **3. What is the oputput**  **int main()**  **{**  **int x = 3;**  **switch (x)**  **{**  **case 0: cout >> "\First";**  **case 1+0: cout << "\nSecond";**  **case 4/2: cout << "\nThird";**  **case 8%5: cout << "\nFourth";**  **}**  **getch();**  **return 0;**  **}** | |

4. What Will Be The Output Of The Following Code Snippet

public class Program

{

public static void Main(string[] args)

{

#if (!pi)

Console.WriteLine("i");

#else

Console.WriteLine("PI undefined");

#endif

Console.WriteLine("ok");

Console.ReadLine();

}

}

a) ok

**b) i**

**ok**

c) PI undefined

ok

d) Error

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**6. Arrays and Multi-Dimensional arrays**

This screen explains how to declare arrays and multi-dimensional arrays in all the programming languages.

|  |
| --- |
| 1. Which of the following correctly declares an array?   * [**A.**](javascript:%20void(0))**int array[10];** * [**B.**](javascript:%20void(0)) int array; * [**C.**](javascript:%20void(0)) array{10}; * [**D.**](javascript:%20void(0)) array array[10];   2. Which of these is an incorrect array declaration?   * [**A.**](javascript:%20void(0)) int arr[] = new int[5] * [**B.**](javascript:%20void(0)) int [] arr = new int[5] * [**C.**](javascript:%20void(0)) int arr[]   arr = new int[5]   * [**D.**](javascript:%20void(0))**int arr[] = int [5] new**   3.Which one of the following statements is correct? |
| |  |  | | --- | --- | | [**A.**](javascript:%20void%200;) | Array elements can be of integer type only. | | [**B.**](javascript:%20void%200;) | The rank of an Array is the total number of elements it can contain. | | [**C.**](javascript:%20void%200;) | The length of an Array is the number of dimensions in the Array. | | [**D.**](javascript:%20void%200;) | **The default value of numeric array elements is zero.** | | [**E.**](javascript:%20void%200;) | The Array elements are guaranteed to be sorted.  4. How will you complete the foreach loop in the C#.NET code snippet given below such that it correctly prints all elements of the array a?   |  | | --- | | int[][]a = new int[2][];  a[0] = new int[4]{6, 1 ,4, 3};  a[1] = new int[3]{9, 2, 7};  foreach (int[ ] i in a)  {  /\* Add loop here \*/  Console.Write(j + " ");  Console.WriteLine();  } | | |  |  | | --- | --- | | [**A.**](javascript:%20void%200;) | *foreach (int j = 1; j < a(0).GetUpperBound; j++)* | | [**B.**](javascript:%20void%200;) | *foreach (int j = 1; j < a.GetUpperBound (0); j++)* | | [**C.**](javascript:%20void%200;) | *foreach (int j in a.Length)* | | [**D.**](javascript:%20void%200;) | ***foreach (int j in i)*** | | [**E.**](javascript:%20void%200;) | *foreach (int j in a.Length -1)* | | |   What is the output of the following code fragment:  int[] ar = {2, 4, 6, 8 };  System.out.println( ar[0] + " " + ar[1] );    a. 2 6  b. 8  c. 2 4  d. 6 8 |

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**7. Operators**

All the supported operators in 3 languages are explained in this screen.

1. In C++ What is this operator called ?: ?

* [**A.**](javascript:%20void(0))**conditional**
* [**B.**](javascript:%20void(0)) relational
* [**C.**](javascript:%20void(0)) casting operator
* [**D.**](javascript:%20void(0)) none of the mentioned

2 Which operator is having right to left associativity in the following?

* [**A.**](javascript:%20void(0)) Array subscripting
* [**B.**](javascript:%20void(0)) Function call
* [**C.**](javascript:%20void(0)) Addition and subtraction
* [**D.**](javascript:%20void(0))**Type cast**

3.What will be the output of the program?

class Equals

{

public static void main(String [] args)

{

int x = 100;

double y = 100.1;

boolean b = (x = y); /\* Line 7 \*/

System.out.println(b);

}

}

|  |  |
| --- | --- |
| [**A.**](javascript:%20void%200;) | True |
| [**B.**](javascript:%20void%200;) | False |
| [**C.**](javascript:%20void%200;) | **Compilation fails** |
| [**D.**](javascript:%20void%200;) | An exception is thrown at runtime |

4. Which of the following are NOT Relational operators in C#.NET?

1. >=
2. !=
3. **Not**
4. <=

What output is produced by the segment of code shown below:

int x = 25;

if (x == 25)

System.out.print("BOBBA");

else

System.out.print("FAB");

Ans BOBBA

Q 7 - What is the output of the following program?

#include<iostream>

using namespace std;

main() {

short unsigned int i = 0;

cout<<i--;

}

A - 0

B - Compile error

C - 65535

D - 32767

2.What output is produced by the segment of code shown below:

int x = 12;

if (x > 12){

if ( x < 15)

System.out.print("BLUE");

}else

System.out.print("GREEN");

System.out.print("JEANS");

Ans GREENJEANS

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**8.Functions**

This screen explains how to declare a function and call a function

1.Which is more effective while calling the functions?

* [**A.**](javascript:%20void(0)) call by value
* [**B.**](javascript:%20void(0))**call by reference**
* [**C.**](javascript:%20void(0)) call by pointer
* [**D.**](javascript:%20void(0)) none of the mentioned

2. What are mandatory parts in function declaration?

* [**A.**](javascript:%20void(0))**return type,function name**
* [**B.**](javascript:%20void(0)) return type,function name,parameters
* [**C.**](javascript:%20void(0)) both a and b
* [**D.**](javascript:%20void(0)) none of the mentioned

|  |  |
| --- | --- |
| 3. | A function returns a value, whereas a subroutine cannot return a value. |
| |  |  | | --- | --- | | [**A.**](javascript:%20void%200;) | **True** | | [**B.**](javascript:%20void%200;) | False | |

4. Which of the following statements are correct in C#?

1. An argument passed to a ref parameter need not be initialized first.
2. Variables passed as out arguments need to be initialized prior to being passed.
3. **Pass by reference eliminates the overhead of copying large data items.**
4. To use a ref parameter only the calling method must explicitly use the *ref* keyword.

1. The statements that belong to a function are contained within:

A.

'(' and ')'

B.

'{' and '{'

C.

Method signatures

D.

A comma separated list: “1,2,..., etc”

What is the output

public class Main {

public static void main(String args[]) {

String x = null;

giveMeAString(x);

System.out.println(x);

}

static void giveMeAString(String y)

{

y = "Quiz";

}

}

A

Quiz

B

null

C

2.

1. Which is not a proper prototype?

A. int funct(char x, char y);

B. double funct(char x)

C. void funct();

D. char x();

3 Which of the following is a complete function?

A. int funct();

B. int funct(int x) {return x=x+1;}

C. void funct(int) {cout&tl;<"Hello"}

D. void funct(x) {cout<<"Hello"}

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Pointers:

Which of the following is the proper declaration of a pointer?  
A. int x;  
B. int &x;  
C. ptr x;  
D. int \*x;  
  
2. Which of the following gives the memory address of integer variable a?  
A. \*a;  
B. a;  
C. &a;  
D. address(a);

Which of the following gives the value stored at the address pointed to by the pointer a?  
A. a;  
B. val(a);  
C. \*a;  
D. &a;

5. #include<iostream>

using namespace std;

class Test

{

private:

int x;

public:

Test(int x = 0) { this->x = x; }

void change(Test \*t) { this = t; }

void print() { cout << "x = " << x << endl; }

};

int main()

{

Test obj(5);

Test \*ptr = new Test (10);

obj.change(ptr);

obj.print();

return 0;

}

A

x = 5

B

x = 10

C

Compiler Error

D

Runtime Error

**++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++**

**String:**

Strings

String myString;

What is the data type of myString

a String

b reference of String

c null

d Object

2.

The following code will allow the program to obtain a name from the keyboard String name = Console.readLine("Enter name);

[a] true

[b] false

3. What is the header file for the string class?

a) #include<ios>

b) #include<str>

**c) #include<string>**

d) None of the mentioned

View Answer

Answer:c

Explanation:None.

4. 4. What is the output of this program?

#include <iostream>

#include <cstring>

using namespace std;

int main ()

{

char str1[10] = "Hello";

char str2[10] = "World";

char str3[10];

int len ;

strcpy( str3, str1);

strcat( str1, str2)

len = strlen(str1);

cout << len << endl;

return 0;

}

a) 5

b) 55

c) 11

**d) 10**

View Answer

Answer:d

Explanation:In the program, We are concatanating the str1 and str2 and printing

it’s total length. So the length is 10.

Output:

$ g++ stri.cpp

$ a.out

10

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**9. Classes and Objects.**

This screen contains tutorial about how a class is declared and objects are created.

1.How many kinds of classes are there in c++?

* [**A.**](javascript:%20void(0)) 1
* [**B.**](javascript:%20void(0))**2**
* [**C.**](javascript:%20void(0)) 3
* [**D.**](javascript:%20void(0)) 4

2. 1. What does your class can hold?

* [**A.**](javascript:%20void(0)) data
* [**B.**](javascript:%20void(0)) functions
* [**C.**](javascript:%20void(0))**both a & b**
* [**D.**](javascript:%20void(0)) none of the mentioned

|  |
| --- |
| 3.Which of the following statements is correct about the C#.NET code snippet given below?  class Student s1, s2; // Here 'Student' is a user-defined class.  s1 = new Student();  s2 = new Student(); |
| |  |  | | --- | --- | | [**A.**](javascript:%20void%200;) | Contents of *s1* and *s2* will be exactly same. | | [**B.**](javascript:%20void%200;) | The two objects will get created on the stack. | | [**C.**](javascript:%20void%200;) | **Contents of the two objects created will be exactly same.** | | [**D.**](javascript:%20void%200;) | The two objects will always be created in adjacent memory locations. | | [**E.**](javascript:%20void%200;) | We should use *delete()* to delete the two objects from memory. | |

4. Which of the following is the correct way to create an object of the *class Sample*?

1. ***Sample s = new Sample();***
2. *Sample s;*
3. *s = new Sample();*

Classes:

What is the output of the following program?

#include<iostream>

using namespace std;

main() {

int \*p = new int;

delete p;

delete p;

cout<<"Done";

}

A - Done

B - Compile error

C - Runtime error

D - None of the above

2 Which of the following is a valid class declaration in C++?

A. class A { int x; };

B. class B { }

C. public class A { }

D. object A { int x; };

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

**10. OOPS Concepts**

The screen explains what are the OOPS concepts are supported by the programming languages and how are they implemented.

1. How many types of inheritance are there in c++?

* [**A.**](javascript:%20void(0)) 2
* [**B.**](javascript:%20void(0)) 3
* [**C.**](javascript:%20void(0)) 4
* [**D.**](javascript:%20void(0))**5**

|  |  |
| --- | --- |
| 2 | Which of the following can be facilitated by the Inheritance mechanism?   1. **A.Use the existing functionality of base class.** 2. **B.Overrride the existing functionality of base class.** 3. **C.Implement new functionality in the derived class.** |
|  |

3  What does inheriatance allows you to do?

* [**A.**](javascript:%20void(0)) create a class
* [**B.**](javascript:%20void(0))**create a hierarchy of classes**
* [**C.**](javascript:%20void(0)) access methods
* [**D.**](javascript:%20void(0)) None of the mentioned

4. Which of the following is correct way of implementing an interface salary by class manager?

* [**A.**](javascript:%20void(0)) class manager extends salary {}
* [**B.**](javascript:%20void(0))**class manager implements salary {}**
* [**C.**](javascript:%20void(0)) class manager imports salary {}
* [**D.**](javascript:%20void(0)) None of the mentioned.

Oops:

Q 4 - What is the output of the following program?

#include<iostream>

using namespace std;

class Base {

public:

virtual void f() {

cout<<"Base\n";

}

};

class Derived:public Base {

public:

void f() {

cout<<"Derived\n";

}

};

main() {

Base \*p = new Derived();

p->f();

}

A - Base

B - Derived

C - Compile error

D - None of the above.

Which of the following is correct way of implementing an interface salary by class manager?

a) class manager extends salary {}

b) class manager implements salary {}

c) class manager imports salary {}

d) None of the mentioned.

-------------------------------------------------------------------------------------------------------------------------------------------

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**11. Files I/O operations**

This screen explains how to read or write from the files on disk using different classes in all the three programming languages.

1. . Which operator is used for input stream?

* [**A.**](javascript:%20void(0)) >
* [**B.**](javascript:%20void(0))**>>**

2. What is the output of this program?

#include < iostream >

using namespace std;

int main ()

{

int i;

cout << "Please enter an integer value: ";

cin >> i + 4;

return 0;

}

* [**A.**](javascript:%20void(0)) 73
* [**B.**](javascript:%20void(0)) your value + 4
* [**C.**](javascript:%20void(0))**Error**
* [**D.**](javascript:%20void(0)) None of the mentioned

3.  Which of these is specified by a File object?

* [**A.**](javascript:%20void(0)) a file in disk
* [**B.**](javascript:%20void(0)) directory path
* [**C.**](javascript:%20void(0))**directory in disk**
* [**D.**](javascript:%20void(0)) None of the mentioned

4. 11. Which of these is a method to clear all the data present in output buffers?

* [**A.**](javascript:%20void(0)) clear()
* [**B.**](javascript:%20void(0))**flush()**
* [**C.**](javascript:%20void(0)) fflush()
* [**D.**](javascript:%20void(0)) close()

How would you output to an open file named a\_file?

A. a\_file.out("Output");

B. a\_file="Output";

C. a\_file<<"Output";

D. a\_file.printf("Output");

2 Which of the following opens an existing file myFile.txt so that characters may be added to its end?

A. FileWriter fw = new FileWriter("myFile.txt");

B. FileWriter fw = new FileWriter("myFile.txt", true);

C. FileWriter fw = new FileWriter("myFile.txt", false);

D. FileWriter fw = new FileWriter("myFile.txt", FileWriter.APPEND);

++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**12. Exception Handling**

This screen teaches how to handle exceptions in the programming languages.

* 1. What is the advantage of exception handling?
* **1) Remove error-handling code from the software's main line of code.**
* **2) A method writer can chose to handle certain exceptions and delegate**
* **others to the caller.**
* **3) An exception that occurs in a function can be handled anywhere in**
* **the function call stack.**

2. Which of these keywords must be used to monitor for exceptions in Java?

* [**A.**](javascript:%20void(0))**try**
* [**B.**](javascript:%20void(0)) finally
* [**C.**](javascript:%20void(0)) throw
* [**D.**](javascript:%20void(0)) catch

3. Which of these keywords is used to manually throw an exception?

* [**A.**](javascript:%20void(0)) try
* [**B.**](javascript:%20void(0)) finally
* [**C.**](javascript:%20void(0))**throw**
* [**D.**](javascript:%20void(0)) catch

|  |
| --- |
| 4.In C#.NET if we do not catch the exception thrown at runtime then which of the following will catch it? |
| |  |  | | --- | --- | | [**A.**](javascript:%20void%200;) | Compiler | | [**B.**](javascript:%20void%200;) | **CLR** | | [**C.**](javascript:%20void%200;) | Linker | | [**D.**](javascript:%20void%200;) | Loader | | [**E.**](javascript:%20void%200;) | Operating system | |

Does the println() method of PrintWriter throw exceptions?

**A. No. No methods of PrintWriter throw exceptions.**

B. Yes. It throws an IOException.

C. Yes. It throws an PrintException.

D. Yes. It throws a DataFormatException.

2 Output of following Java program?

class Main {

public static void main(String args[]) {

int x = 0;

int y = 10;

int z = y/x;

}

}

A

Compiler Error

B

Compiles and runs fine

C

Compiles fine but throws ArithmeticException exception