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Today discussion is QA(doubts resolving) not live session
Doubt discussion : wednesday( 2PM to 4PM IST)
                                  saturday (6PM IST to 8PM IST)
next live class on : Monday(7.30PM IST to 10.30PM IST)
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----------------------------------------------------------------------------
Q>
what is jar files?
      Collection of .class files we represent as Jar files(Java Archieve file).

Q>
 which editor I used for java program and how to use eclipse for java program
            editor -> Editplus /notepad
            IDE     -> using Eclipse,later we move to STS(Spring tool Suite)

Q>what is the difference between method and main method?
            main method -> it is a method from where the jvm would start the
execution.
            method -> set of instructions written by programmer.

Q> yesterday snippet 4 private cls and arguments
            private class Demo{
                 public static void main(String[] args){
                      System.out.println(args[1]);
                 }
            }
            javac Demo.java  //Compile time Error(file name which contains main()
should be under public)
            java Demo Good morning guys

Q> please tell me the concept of (String [] agrs)
                 It will discussed when we talk on "Arrays" ,followed by "String"
class.
                 The data will be stored inside the args in the form of String and
it is an Array.

Q>byte ab=10; // data compiler by default treats as int,but in the range of byte so
no problem
byte ac=2; // data compiler by default treats as int,but in the range of byte so no
problem
byte result = ab*ac;// when we perfom the operation compiler is designed to store
the data in the higher
                                             datatype of the specific type
                                                 eg: byte(1),short(2),int(4)
----->type promoted to int
                                             int result  = byte * byte
System.out.println(result);

Q> sir whatis differenc in git master and main .yesterday I was uploading a file on
GitHub and
      it was not uploading with git push -u origin main  .bit it worked with git
push -u master?
 ans. branch names they are, it will taught moving further.

Q> sir in one interview , interviewer asked me what is the diff b/w a=a+1 and a++?
                 byte a = 10;
                 a  = a + 1;//CE:possible loss of precession
                 System.out.println(a);
```

```
                    byte a = 10;//JVM will give memory of 1 byte and data 10 is
stored
                        a++;//no problem for compiler
                        // a = (byte)(a+1);//11 will be stored as a byte by the JVM
                    System.out.println(a);

                    byte a = 10;
                        a+=1;//Short hand operator in operators topic it will
discussed,no problem for compiler
                                        and jvm will resolve it through explicit
typecasting.
                    System.out.println(a);
```

Q> sir what will happen if we add multiple main methods ?
       a. can we write mulitple methods with same name in a single class

```
class Test
{
     public static void main(String[] args)
     {
          System.out.println("hiee");
     }
     public static void main(String[] args)
     {
          System.out.println("hello");
     }
}
```
output: CompileTime Error

Q> Sir why the 'S' in system and ' S' in string is in upper case letter. can you
explain it?
            reserved words -> It should start with lower case(convention followed
by Oracle team)
            ClassName/interface name -> It should start with Upper case.(convention
followed by Oracle team).

                    int,float,double -> reserve words so lower case
                    String,System   -> class name so upper case

Q> sir can we write class without main method means like empty class?
            Ans. yes, possible but that file can't be given to jvm (java FileName).

                    If we give it would result in "Exception" as main method not
found.

Q> what if variable name and reserve keywords got same in same program?
            int int a = 10; //CE: becoz reserve words can't be used as a
identifier/varaible name

Q> sir if we use class name first letter in small case will it be a problem?
          No problem ,but as a good practise follow the convention to avoid the
disturbance in readability

      eg: class Test{}//code is as per Convention(experience developers code)
            class test{}//code is not per Convention(inexperienced developers
code)

Q>
sir what is difference between top down and bottom up approach in progamming

Approach towards solving the code in realtime.(DSA part it is)

Q>
Hi Nitin, byte is able to store 1 byte of memory but char can store 2 bytes
of memory so internal typecasting won't be happened. but why it haven't throw error
in byte code
 byte b='a'; as right side value will be assigned to b.
                    byte ----> 1 byte
                    char ----> 2 byte

Compiler is desinged to this type of conversion so we call this as "Implicit type
casting".
       byte------------> short -------------> int -------------> long ----------->
float ---------> double
                                                                 ^
                                                                 |
                                                                 |
                                                    char(2 bytes) ====> to
support "Internationalization"

Internationlization -> Supporting the application to the end users as per there
country regional language.

Reverse of it if has to be done then programmer should write the statement of
casting it is called as
"Explicit type casting".

Q> sir why always it is necessary to define the main method as 'static' ?
            JVM should call main method without creating the Object.
            if a method is marked as static then that method would be called using
ClassName
            So we want jvm to call main method using className so mark main() as
"static