

COMP 2522 - Winter 2024 - Quizz 3

Note : I put one page per question but the answer can be very short for some of them.

1. The code below has an error. Why is there an error ? Fix the error and then give the output.
(4 marks)

```
1  class Structure{
2      public Structure(){
3          System.out.println("structure");
4      }
5  }
6
7  class Building extends Structure{
8      int size;
9      public Building(int s){
10         size = s;
11         System.out.println("building");
12     }
13 }
14
15 class House extends Building{
16     public House(){
17         System.out.println("house");
18     }
19 }
20
21 public class Construction{
22     public static void main(String[] args){
23         Structure s = new House();
24     }
25 }
```

Answer :

2. Give the output for the program below. (4 marks)

```
1  class I{
2      int i = 9;
3      int j;
4      I(){
5          prt("i = "+i+", j = "+j+);
6          j = 39;
7      }
8
9      static int x1 = prt("static I.x1 initialized");
10
11     static int prt(String s){
12         System.out.println(s);
13         return 47;
14     }
15 }
16
17 public class B extends I{
18     int k = prt("B.k initialized");
19     B(){
20         prt("k = "+k);
21         prt("j = "+j);
22     }
23     static int x2 = prt("B.x2 initialized");
24
25     public static void main(String[] args){
26         System.out.println("Started program");
27         B b;
28     }
29 }
```

Answer :

3. Give the output for the program below. Note the slight change from the previous question) (2 marks)

```
1  class I{
2      int i = 9;
3      int j;
4      I(){
5          prt("i = "+i+", j = "+j+);
6          j = 39;
7      }
8
9      static int x1 = prt("static I.x1 initialized");
10
11     static int prt(String s){
12         System.out.println(s);
13         return 47;
14     }
15 }
16
17 public class B extends I{
18     int k = prt("B.k initialized");
19     B(){
20         prt("k = "+k);
21         prt("j = "+j);
22     }
23     static int x2 = prt("B.x2 initialized");
24
25     public static void main(String[] args){
26         new B();
27     }
28 }
```

Answer :