COMP 2522 - Winter 2024 - Quizz 5

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

1. Using the below explain why using Generics is beneficial. Why does it compile but not run? (2 marks)

```
1  String[] data = new String[1];
2  Object[] ptr;
3  ptr = data;
4  ptr[0] = 15;
```

Answer :

2. Demonstrate how you can use Generics to improve the below copy() method and WHY it is better than the original method. (2 marks)

```
1  void copy(Object[] a, Object[] b){
2         System.array.copy(a,0,b,b.length); // assumes array b[] is large enough
3  }
```

Answer :

3. Write the function below as a generic function. (4 marks)

```
1   Interface Comparable<X>{
2          int compareTo(X x);
3   }
4
5   public static int min(int[] data){
6          int result = data[0];
7          for(int value : data){
8                 if(result>value)
9                         result = value
10         }
11         return res;
12  }
```

Answer :