OCP QUESTION 3

Given the code fragment:

```
BiFunction<Integer, Double, Integer> value = (p1, p2) -> p1 + p2; // n1
System.out.println(value.apply(1, 1.5));                          // n2
```

What is the result?

A. 2

B. 2.5

C. A compilation error occurs at line n1

D. A compilation error occurs at line n2

OCP QUESTION 10

Given the code fragment:

```
List<Integer> num = Arrays.asList(1, 2);
UnaryOperator<Double> unop = x -> x + 1.0;
num.replaceAll(unop);
num.forEach(x -> System.out.println(x));
```

What is the result?

A. 2.0
3.0
B. 1
C. A compilation error occurs.
D. A NumberFormatException is thrown at run time.

OCP QUESTION 12

Given:

```
interface Laughable {Joke crackJoke(String joke); }
class Joke {
    private String joke;
    public Joke(String joke) {
        this.joke = joke;
    }
}
```

Which code fragment creates an instance of Joke?

```
A. Joke hello = Joke("MyJoke")::new;
B. Joke hello = Joke::new;
   Joke oneMore = hello::crackJoke("MyJoke");
C. Laughable joker = Joke::new;
   Joke oneMore = joker.crackJoke("MyJoke");
D. Joke oneMore = Laughable::new::crackJoke("MyJoke");
```

OCP QUESTION 17

Given the code fragment:

```
UnaryOperator<Integer> unop = x -> x*2;              // line 1
List<Double> nums = Arrays.asList(10.0, 20.0);
nums.stream()
    .filter(x -> x > 15.0)
    .map(x -> unop.apply(x))                         // line 2
    .forEach(x -> System.out.print(x));
```

What is the result?

A. 40.0
B. 40
C. A compilation error occurs at line 1.
D. A compilation error occurs at line 2.

OCP QUESTION 18

Given the code fragment:

```
List<String> ad = Arrays.asList(
    "See", "Java", "run.",
    "Run", "Java", "run.");
Predicate<String> test = x -> {
    int i = 0;
    boolean hit = x.contains("Java");
    System.out.print(i++ + " - ");
    return hit;
};
ad.stream()
  .filter(test)
  .findFirst()
  .ifPresent(System.out::print);
```

What is the result?

A. 0 – 0 – Java
B. 0 – 1 – Java
C. 0 – 0 – 0 – 0 – 0 – 0 – Java
D. 0 – 1 – 2 – 3 – 4 – 5 – 6 –
E. A compilation error occurs

OCP QUESTION 21

Given the code fragment:

```
List<Integer> list1 = Arrays.asList(1, 2);
List<Integer> list2 = Arrays.asList(3, 4);
//line n1
```

Which code fragment, when inserted at line n1, prints 1 2 3 4?

A.
```
Stream.of(list1, list2)
        .flatMap(x -> x.stream())
        .forEach(x -> System.out.print(x + " "));
```

B.
```
Stream.of(list1, list2)
        .flatMap(x -> x.intStream())
        .forEach(x -> System.out.print(x + " "));
```

C.
```
list1 .stream()
        .flatMap(list2.stream().flatMap(x -> x.stream())
        .forEach(x -> System.out.println(x + " "));
```

D.
```
Stream.of(list1, list2)
        .flatMapToInt(x -> x.stream())
        .forEach(x -> System.out.print(x + " "));
```

OCP QUESTION 32

Given the code fragment:

```
List<String> graces = Arrays.asList("faith", "hope", "love");
Predicate<String> test = x -> {
    System.out.println("Still waiting...");
    return x.contains("love");
};
graces.stream()
      .filter(x -> x.length() >= 4)
      .allMatch(test);
```

What is the result?

A. Still waiting...

B. Still waiting...
Still waiting...

C. Still waiting...
Still waiting...
Still waiting...

D. A compilation error occurs.

OCP QUESTION 33

Given:

```
public class Item {
    int id; int price;
    public Item (int id, int price) {
        this.id = id;
        this.price = price;
    }
    public String toString() { return id + " : " + price; }
}
```

and the code fragment:

```
List<Item> inventory = Arrays.asList(new Item(1, 10),
    new Item(2, 15),
    new Item(3, 20));
Item item = inventory.stream()
                     .reduce(new Item(4, 0), (x, y) -> {
                             x.price += y.price;
                             return new Item(x.id, y.price);});
inventory.add(item);
inventory.stream()
         .parallel()
         .reduce((x, y) -> x.price > y.price ? x : y)
         .ifPresent(System.out::println);
```

What is the result?

A. 4 : 45
B. 4 : 0
C. 4 : 20
D. 1 : 10
2 : 15
3 : 20
4 : 45
E. The program prints nothing

OCP QUESTION 39

Which statement is true about the single abstract method of the `java.util.function.Function` interface?

A. It accepts one argument and returns void.
B. It accepts one argument and returns boolean.
C. It accepts one argument and always produces a result of the same type as the argument.
D. It accepts an argument and produces a result of any data type.

OCP QUESTION 42

Given:

```
class Browser {
    public void surf() {
        System.out.print("See me surf!");
    }
}
class Tor extends Browser {
    public void surf() {
        System.out.print("Stealth mode engaged.");
    }
}
```

and the code fragment:

```
class Tails {
    public static void main(String[] args) {
        surf(() -> new Browser());
        surf(Tor::new);
    }
    /* line n1 */
}
```

Which code fragment, when inserted at line n1, enables the Tails class to compile?

A.
```
static void surf(Consumer<Browser> browser) {
   browser::surf();
}
```

B.
```
static void surf(Consumer<? extends Browser> browser) {
   browser.accept().surf();
}
```

C.
```
static void surf(Supplier<Browser> browser) {
   browser.get().surf();
}
```

D.
```
static void surf(Supplier<? extends Browser> browser) {
   browser::surf();
}
```

OCP QUESTION 46

Given the code fragments:

```
class Customer {
    Optional<Email> contact;
    Customer (Optional<Email> contact) {
        this.contact = contact;
    }
    public Optional<Email> getContact() {
        return contact;
    }
}
class Email {
    String email = "joe.random@planet.earth";
    public String getEmail() { return email; }
    public String toString() {
        return email;
    }
}
```

and

```
Email email = null;
Optional<Email> contact = Optional.ofNullable(email);
Customer cust = new Customer(contact);
String eEmail = (contact.isPresent()) ? contact.get().getEmail() : "N/A";
System.out.println(eEmail);
```

What is the result?

A. joe.random@planet.earth
B. N/A
C. null
D. A NoSuchElementException is thrown at run time

OCP QUESTION 51

Given the code fragment:

```
String str = "Say what?!";
ToIntFunction<String> indx = str::indexOf;   //line n1
int a = indx.applyAsInt("Say");              //line n2
System.out.println(a);
```

What is the result?

A. 0
B. 1
C. A compilation error occurs at line n1
D. A compilation error occurs at line n2

OCP QUESTION 91

Given:

```
IntStream inStr = IntStream.of(1, 2, 3);
IntFunction<Integer> inFunc = x -> y -> x * y;      // line n1
IntStream result = inStr.map(inFunc.apply(4));      // line n2
result.forEach(System.out::print);
```

Which modification enables the code fragment to compile?

A. Replace line n1 with:

```
IntFunction<UnaryOperator> inFunc = x -> y -> x * y;
```

B. Replace line n1 with:

```
IntFunction<IntUnaryOperator> inFunc = x -> y -> x * y;
```

C. Replace line n1 with:

```
BiFunction<IntUnaryOperator> inFunc = x -> y -> x * y;
```

D. Replace line n2 with:

```
IntStream result = inStr.map(inFunc.applyAsInt(4));
```