# Homework 9

Q1: StringBuilder class represents a mutable sequence of characters (Strings). This class also provide the StringBuffer class. String buffer consume less memory and faster when concat operation runs than string concatenation operation. In addition, StringBuffer class does not override the equals() method of Object. This means that if we are compare two string contents we don't need the equals method.

String Builder is not thread safe because they have no synchronized methods. This situation leads the builder single thread environment. In addition, String Builder local variable where only one thread will be accessing a StringBuilder object. This discarded the option A

When we compare the two StringBuilder object, both of the objects turned string with toString() method and these string representations uses the equals() method. Not the equality operator. (==) This situation eliminate the option B

## **Answer is option C**

**Q2:** We can create **String** objects by using the constructor and **new** keyword. When it created a as a String object cannot be changed this means simply **immutable**. Final refers to variable then final does not mean the object is immutable. Final variable and final Classes are different types of meanings.

# Answer is option D

**Q3:** Append() method is used to attach the specified string with given string in parameter. The append.

StringBuilder() constructs a string of giving content of parameter.

*İnsert()* method is used to put given string or different data type with this data at the specific position.

The insert method which place selected in last index and append methods has same effect. There are two parts of word inserted end of string and occur the original word clown. The result take us option D

## Answer is option D

**Q4:** There are only a string includes of threes ("333"). The other strings ("806") and ("1601") concatenates successfully. ("333 806 1601").

# Answer is option B

**Q5:** List is a fundamental collection type in Java Collections class. A list collection stores elements by insertion order. A list maintains indices of its elements so it allows adding changing and modifying the elements. List element have zero based index.

List collection type is an interface. Interfaces cannot be instantiated. Only concrete types can be instantiated. If we want to use an arraylist, which is an implementation of the list interface. The type of collection represented as angle brackets.

Objects is broader than List collection type thus the compiler give the mismatch error. It should be cast to the List operation.

The Arraylist class implements the list interface. When the Arraylist used we need to import util. ArrayList package. When we define with it can parameterized with angle brackets (<>)

## Answer is option B

**Q6:** ArrayList is an resizable array implementation of List interface. This class implements all of the List interface methods. In addition this class have the regulate the size of an array. The list interface has zero index based also ArrayList has it. The code returns the index one. In other words the second element returns and it equals the nail keyword.

## Answer is option C

Q7: This code does not compile becuase it needs to be initialized. Java has the rule to initialize the local variable before accessing or using them and this is checked at compile time.

#### Answer is option C

**Q8:** This code is compiled after the adding the import statements. Museums array created and three string value added the list. When control flo comes to the remove(2) the third index should be remove. The removed part is string art and the remainder part is consist of natural history and science.

## Answer is option A

**Q9:** When the string created it prints the 12 as a string. Then 3 is added next to the first string 12. The new string is reversed with the method reverse and it turns to the 321.

## Answer is option C

**Q10:** Lambda expression enables to the programmers write less code and avoiding repetition of same variables. It does not convert the convert the wrapper class. It does not affect the bytecode and does not blend the inheritance.

#### Answer is option D

Q11: When we created the new object with the StringBuilder data type with a parameter and append operation both of the same operation. Thus the compare operation return true. When the line append command executed and both are assigned with "——" the length of line is equal to the 2

# Answer is option D

Q12: If I tried with the blank with the arraylist the compiler give the Arraylist error. It behaves like generic type. Generics enable types to be parameters when defining classes, interfaces and methods. When the placed the StringBuilder compiler give the void is invalid type error.

## Answer is option D

Q13: Prediacate keyword is used in functional interface and it needs to be imported to the class file. StringBuilder class occurs the necesity.

### Answer is option A

Q14: This code create the chars list and add characters (a b) firstly. Then b character returns the (a c) When it comes the next line code remove from zero index. The remaining is c. this character does not contain b and it has one element.

# Answer is option A

Q15: Compiler gives the error. Because the reverse method can not defined in String class. This method belongs to the StringBuilder,StringBuffer method. This code does not compile

## Answer is option D

**Q16:** The third one does not compiled because there is an syntax error occured. When the lambda expression written; Type problem occured. The lambda expressin defined as An interface with single abstract method is called functional interface.

## Answer is option C

Q17: It takes the double angle vaule 45 and this value enables the boolean type expression. So this return true to the consol screen.

#### Answer is option A

Q18: This code prints only first number 694. Because concat method needs the another string to the combine of the two strings.

### Answer is option A

Q19: ArrayList<E> found in java util package

String not in java util package. IT has found at java.lang.String package

LocalDate not in java util package. IT has found in java.time Class LocalDate

The result is only one

Answer is option A

**Q20:** All option print the same radical robots string. In option C these are radical word adjacent to robots word. If the index written by 8 it became same.

Answer is option C

**Q21:** In this code array converted to a list type. Contains method cheek the list for the seaching the value is available. There is mismatch type error and this code does not compile.

Answer is option C

**Q22:** When string object startswith command (**startsWith**()) return true contains method also true Because it does not include abc everytime.

Answer is option D

**Q23:** The code add the a c b with the executing order then a is at zero index and removed .Totally there are two elements.

**Answer is option C** 

Q24: The startswith method in this code exists in the String class so the result is option b

Answer is option B

**Q25:** Both side of the code its no necesity of arguments. Arraylist can be parametized with the angle brackets is right choice.

Answer is option B

**Q26:** Integer Object and String class not a solution for given code snippet.

Answer is option D

**Q27:** This code prints false to the screen because line is one dash an another line is occured in two dashes. Also it prints one because it is created at first line.

### Answer is option A

**Q28:** StartsWith method not in defined for Object class. It defines in String class. Thus this code does not compile.

Answer is option C

**Q29:** In java There is **Timestamp** class. There is not **LocalTimeStamp** class in java. Local Time and LocalDateTime classes include the second minute and hours data fields.

Answer is option B

**Q30:** The substring method divided the string in giving number of parameter. The string is cuts off and remaining only 1. When the control flow comes the 2 parameter this is cause the Array index of bound exception. So this code does not compile.

**Answer is option D** 

Q31: When use the lambda expression first stage include the inut parameters the second part is body of the lambda expression. The second expression can represented as curly braces and just like a new line of statement. So this goes the option D.

Answer is option D

**Q32:** Local date is assigned to the xmas object. PlusDays method does not affected the xmas object. The result is return 25.

Answer is option D

**Q33:** StringBuilder type sb is created red string placed in it. R is deleted with deleteChar at zero index. Other delete method erase the d character and there is an only letter e

Answer is option A

**Q34:** The Predicate is equal to clear and it does not match with the pink.

Answer is option B