DAILY ONLINE ACTIVITIES SUMMARY

Date:	**22-05-2020**	**Name:**	**Anvitha Poojary**
Sem & Sec	**6A**	**USN:**	**4AL17CS008**

Online Test Summary

Subject	**OR**		
Max. Marks	**30**	**Score**	**30**

Certification Course Summary

Course	**Introduction to Ethical Hacking**		
Certificate Provider	**greatlearning**	**Duration**	**6hr**

Coding Challenges

Problem Statement:

1.Write a C Program to implement various operations of Singly Linked List Stack.

2.Write a Java Program to separate the Individual Characters from a String

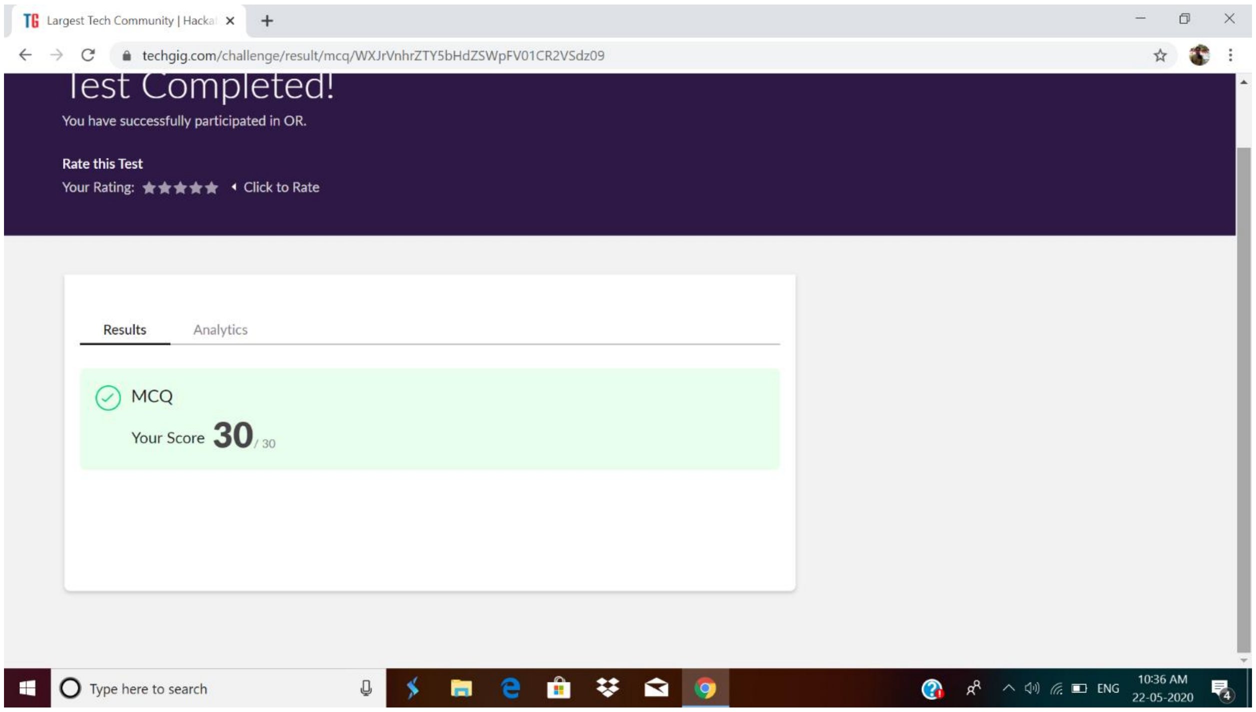
3.Write a Java Program to find the largest and smallest word in a string.

Status: completed

Uploaded the report in Github	**Yes**
If yes Repository name	https://github.com/anvithapo99/REPORT5
Uploaded the report in slack	**Yes**

Online test details:

Subject:OR


Largest Tech Community | Hacka

techgig.com/challenge/result/mcq/WXJrVnhrZTY5bHdZSWpFV01CR2VSdz09

Test Completed!

You have successfully participated in OR.

Rate this Test

Your Rating: ★★★★★ Click to Rate

Results Analytics

MCQ

Your Score 30/ 30

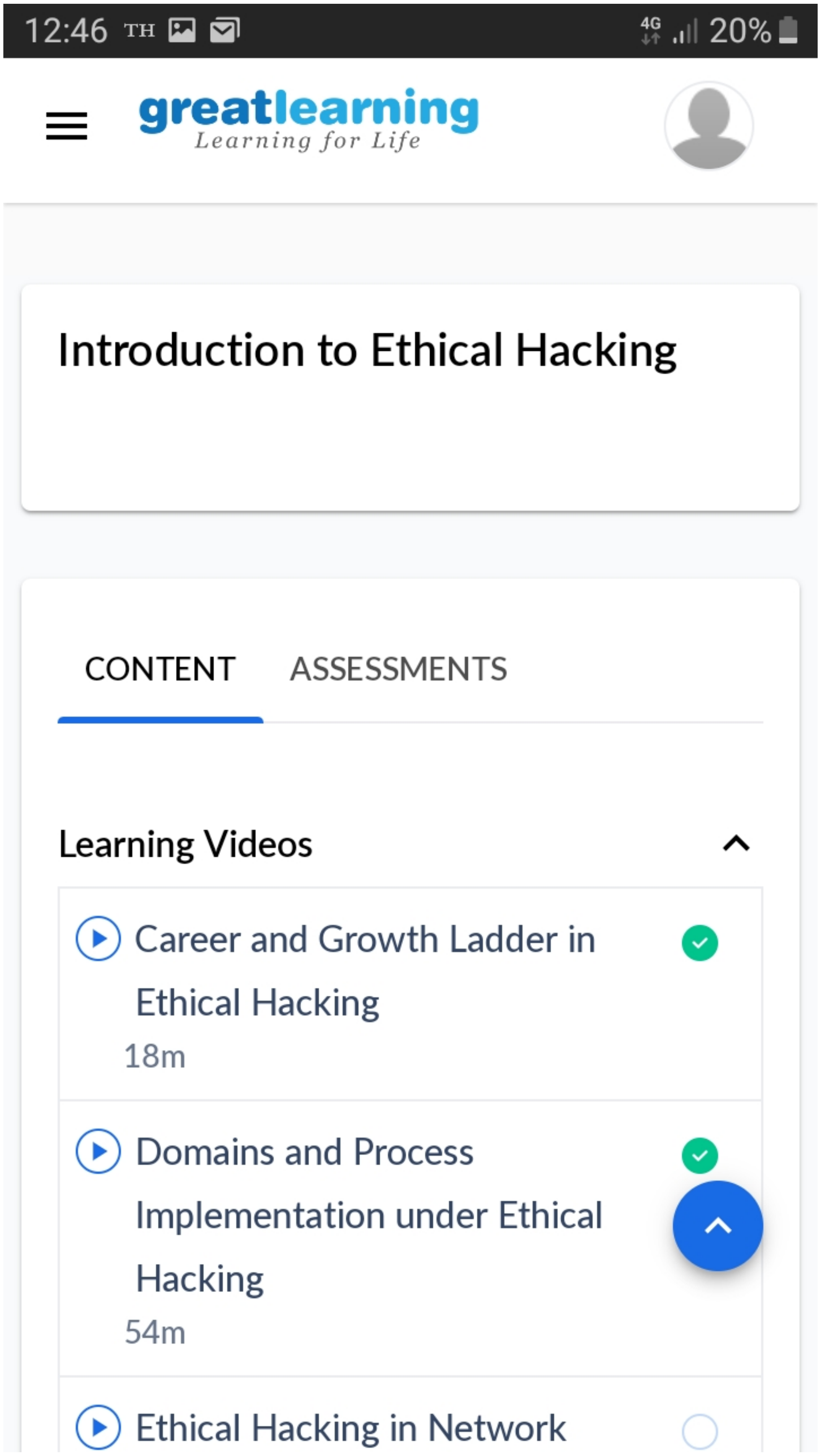
Certification course details:

<u>Introduction to Ethical Hacking:</u>

Today I have studied following topics:

- Career and growth ladder in ethical hacking
- Domains and process implementation under thical hacking
- Web application domain
- Common web application attack
- Hacking methodology
- Network domain
- Types of network attack

- Types of android attack.



Introduction to Ethical Hacking

CONTENT ASSESSMENTS

Learning Videos

Career and Growth Ladder in Ethical Hacking 18m	✓
Domains and Process Implementation under Ethical Hacking 54m	✓
Ethical Hacking in Network	○

Coding Challenges Details:

1.Write a C Program to implement various operations of Singly Linked List Stack.

```
#include <stdlib.h>


struct node
{
    int info;
    struct node *ptr;
}*top,*top1,*temp;


int topelement();
void push(int data);
void pop();
void empty();
void display();
void destroy();
void stack_count();
void create();


int count = 0;


void main()
{
    int no, ch, e;
```

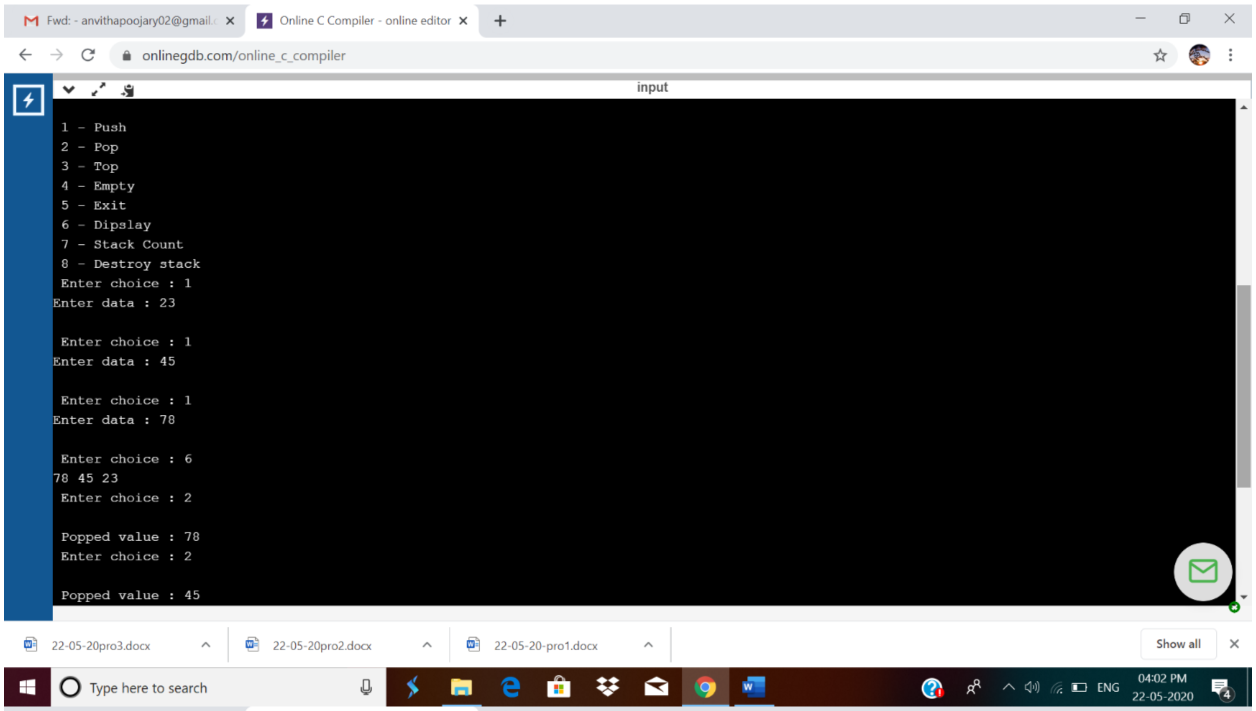
```
printf("\n 1 - Push");
printf("\n 2 - Pop");
printf("\n 3 - Top");
printf("\n 4 - Empty");
printf("\n 5 - Exit");
printf("\n 6 - Dipslay");
printf("\n 7 - Stack Count");
printf("\n 8 - Destroy stack");

create();

while (1)
{
    printf("\n Enter choice : ");
    scanf("%d", &ch);

    switch (ch)
    {
    case 1:
        printf("Enter data : ");
        scanf("%d", &no);
        push(no);
        break;
    case 2:
        pop();
        break;
    case 3:
        if (top == NULL)
            printf("No elements in stack");
        else
        {
            e = topelement();
            printf("\n Top element : %d", e);
        }
        break;
    case 4:
        empty();
        break;
    case 5:
        exit(0);
    case 6:
        display();
        break;
    case 7:
        stack_count();
        break;
    case 8:
        destroy();
        break;
    default :
        printf(" Wrong choice, Please enter correct choice  ");
```

```
            break;
        }
    }
}

/* Create empty stack */
void create()
{
    top = NULL;
}

/* Count stack elements */
void stack_count()
{
    printf("\n No. of elements in stack : %d", count);
}

/* Push data into stack */
void push(int data)
{
    if (top == NULL)
    {
        top =(struct node *)malloc(1*sizeof(struct node));
        top->ptr = NULL;
        top->info = data;
    }
    else
    {
        temp =(struct node *)malloc(1*sizeof(struct node));
        temp->ptr = top;
        temp->info = data;
        top = temp;
    }
    count++;
}

void display()
{
    top1 = top;

    if (top1 == NULL)
    {
        printf("Stack is empty");
        return;
    }

    while (top1 != NULL)
    {
        printf("%d ", top1->info);
        top1 = top1->ptr;
    }
 }
```

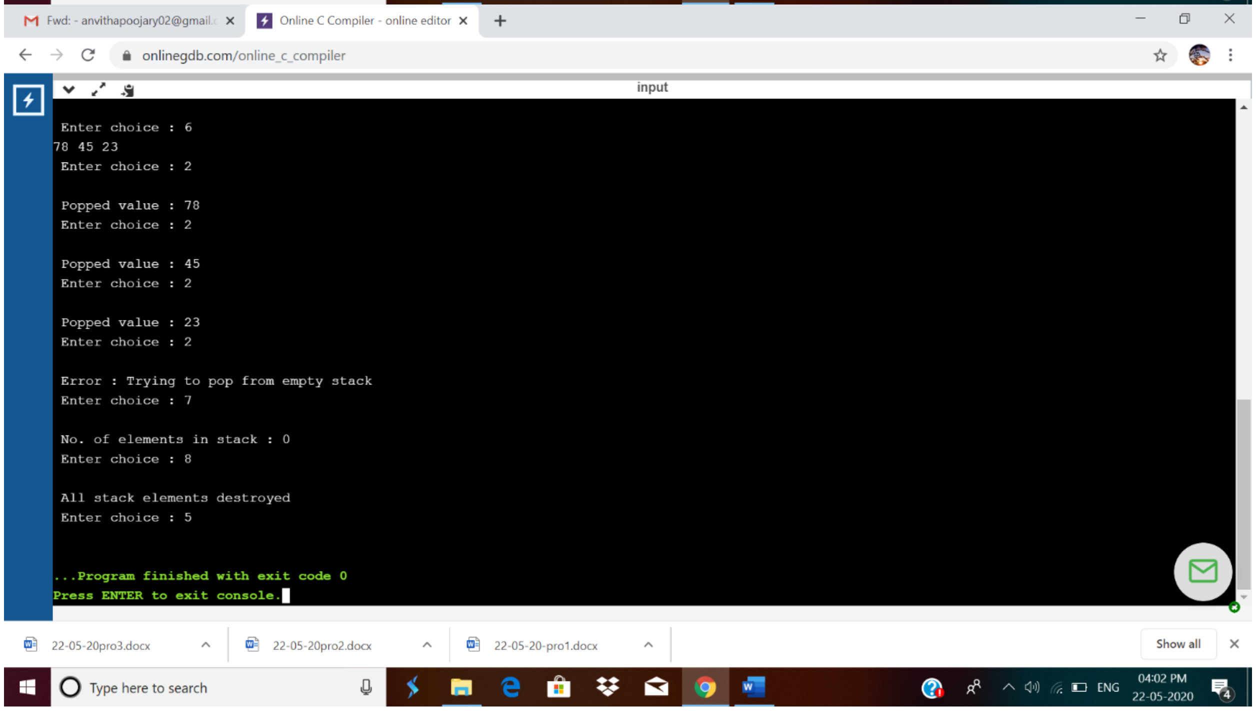
```
void pop()

{

    top1 = top;


    if (top1 == NULL)

    {

        printf("\n Error : Trying to pop from empty stack");

        return;

    }

    else

        top1 = top1->ptr;

    printf("\n Popped value : %d", top->info);

    free(top);

    top = top1;

    count--;

}

int topelement()

{

    return(top->info);

}

void empty()

{

    if (top == NULL)

        printf("\n Stack is empty");

    else
```

```
        printf("\n Stack is not empty with %d elements", count);
}
void destroy()
{
    top1 = top;

    while (top1 != NULL)
    {
        top1 = top->ptr;
        free(top);
        top = top1;
        top1 = top1->ptr;
    }
    free(top1);
    top = NULL;

    printf("\n All stack elements destroyed");
    count = 0;
}
```

Output:-



```
 1 - Push
 2 - Pop
 3 - Top
 4 - Empty
 5 - Exit
 6 - Dipslay
 7 - Stack Count
 8 - Destroy stack
 Enter choice : 1
Enter data : 23

 Enter choice : 1
Enter data : 45

 Enter choice : 1
Enter data : 78

 Enter choice : 6
78 45 23
 Enter choice : 2

 Popped value : 78
 Enter choice : 2

 Popped value : 45
```



```
 Enter choice : 6
78 45 23
 Enter choice : 2

 Popped value : 78
 Enter choice : 2

 Popped value : 45
 Enter choice : 2

 Popped value : 23
 Enter choice : 2

 Error : Trying to pop from empty stack
 Enter choice : 7

 No. of elements in stack : 0
 Enter choice : 8

 All stack elements destroyed
 Enter choice : 5


...Program finished with exit code 0
Press ENTER to exit console.
```

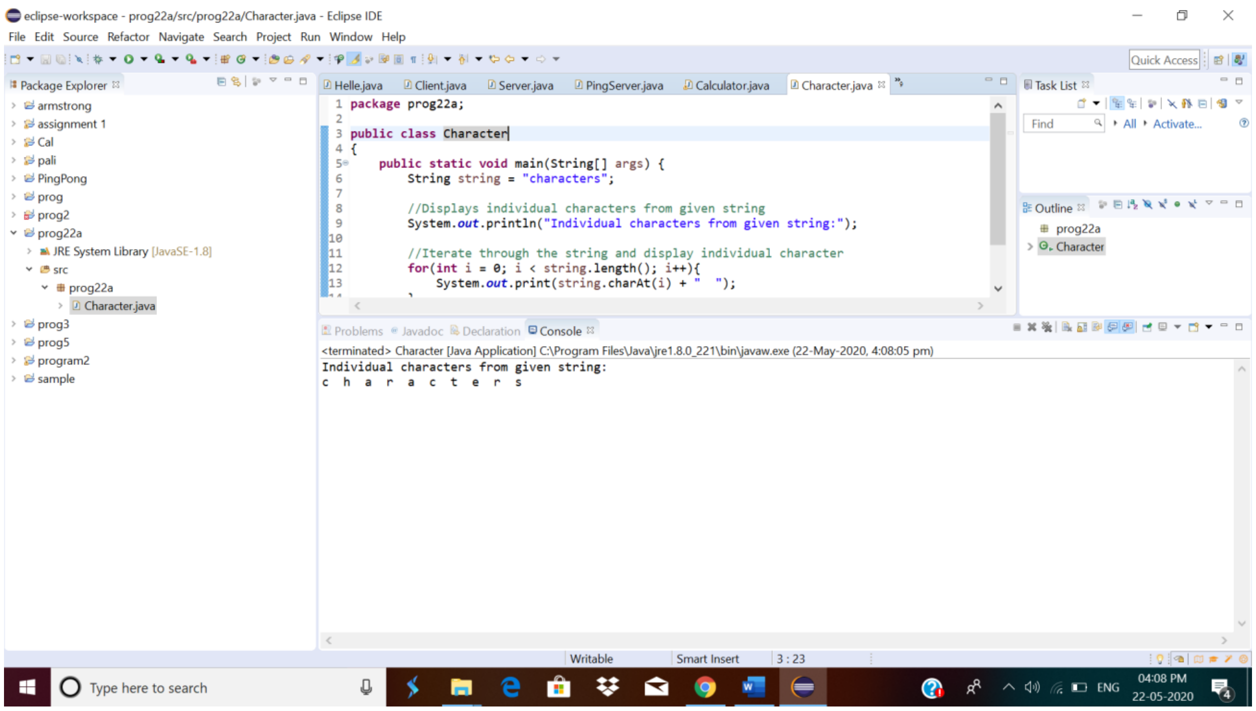
2.Write a Java Program to separate the Individual Characters from a String

Description:
In computer science, collection of characters including spaces is called as string. To separate an individual character from the string, individual characters are accessed through its index.

```
Algorithm
STEP 1: START
STEP 2: DEFINE String string = "characters "
STEP 3: PRINT "Individual characters from given string: "
STEP 4: SET i=0. REPEAT STEP 5 to STEP 6 UNTIL i<string.length()
STEP 5: PRINT string.charAt(i)
STEP 6: i=i+1
STEP 7: END
```

```
public class Main

{

    public static void main(String[] args) {

        String string = "characters";



        //Displays individual characters from given string

        System.out.println("Individual characters from given string:");



        //Iterate through the string and display individual character

        for(int i = 0; i < string.length(); i++){

            System.out.print(string.charAt(i) + "  ");

        }

    }

}
```

Output:



```java
package prog22a;

public class Character
{
    public static void main(String[] args) {
        String string = "characters";

        //Displays individual characters from given string
        System.out.println("Individual characters from given string:");

        //Iterate through the string and display individual character
        for(int i = 0; i < string.length(); i++){
            System.out.print(string.charAt(i) + "  ");
```

```
<terminated> Character [Java Application] C:\Program Files\Java\jre1.8.0_221\bin\javaw.exe (22-May-2020, 4:08:05 pm)
Individual characters from given string:
c  h  a  r  a  c  t  e  r  s
```

3.Write a Java Program to find the largest and smallest word in a string.

Description:
ALGORITHM

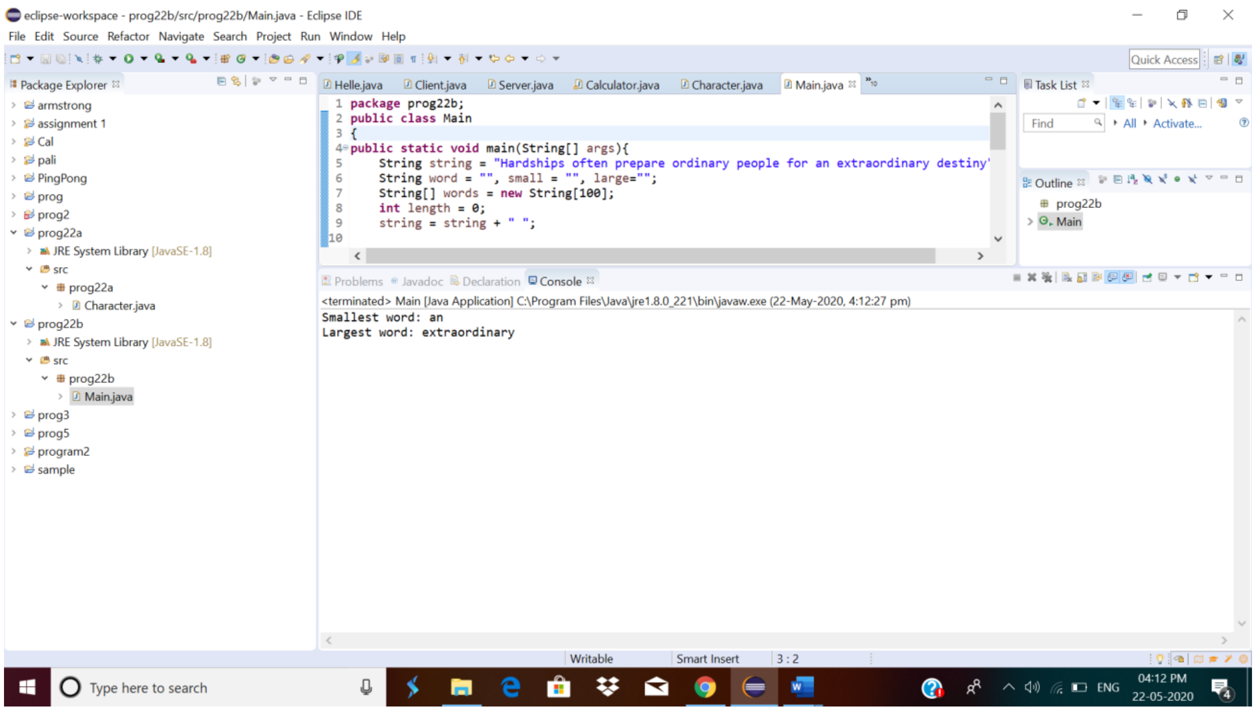
```
STEP 1: START
STEP 2: DEFINE String string="Hardships often prepare ordinary people for an
extraordinary destiny"
STEP 3: DEFINE word = " ", small = " ", large = " ".
STEP 4: Make object of String[] words.
STEP 5: SET length =0
STEP 6: string = string + " "
STEP 7: SET i=0. REPEAT STEP 8 to 9 STEP UNTIL i
STEP 8: IF(string.charAt(i) != ' ') then
word =word + string.charAt(i)
else
word[length]=word
length =length + 1
word = " "
STEP 9: i=i+1
STEP 10: small = large =words[0]
STEP 11: SET k = 0. REPEAT STEP 12 to STEP 14 UNTIL k
STEP 12: IF(small.length() > words[k].length())
then
small = words[k]
```

```
STEP 13: IF(large.length() < words[k].length())
then
large = words[k]
STEP 14: k = k + 1
STEP 15: PRINT small
STEP 16: PRINT large
STEP 17: END
```

```
public class Main  {



  public static void main(String[] args){

      String string = "Hardships often prepare ordinary people for an extraordinary
destiny";

      String word = "", small = "", large="";

      String[] words = new String[100];

      int length = 0;

      string = string + " ";



      for(int i = 0; i < string.length(); i++){

          if(string.charAt(i) != ' '){

              word = word + string.charAt(i);

          }

          else{

              words[length] = word;

              length++;

              word = "";

          }

      }
```

```
    small = large = words[0];

    for(int k = 0; k < length; k++){

        if(small.length() > words[k].length())

            small = words[k];

        if(large.length() < words[k].length())

            large = words[k];

    }

    System.out.println("Smallest word: " + small);

    System.out.println("Largest word: " + large);

 }  }
```

<u>Output:</u>



```
package prog22b;
public class Main
{
public static void main(String[] args){
    String string = "Hardships often prepare ordinary people for an extraordinary destiny'
    String word = "", small = "", large="";
    String[] words = new String[100];
    int length = 0;
    string = string + " ";

```

```
<terminated> Main [Java Application] C:\Program Files\Java\jre1.8.0_221\bin\javaw.exe (22-May-2020, 4:12:27 pm)
Smallest word: an
Largest word: extraordinary
```