DAILY ONLINE ACTIVITIES SUMMARY

Date:	**21-05-2020**	**Name:**	**Anvitha Poojary**
Sem & Sec	**6A**	**USN:**	**4AL17CS008**

Online Test Summary

Subject	**OS**		
Max. Marks	**30**	**Score**	**30**

Certification Course Summary

Course	**Front end development-HTML**		
Certificate Provider	**greatlearning**	**Duration**	**3:30hr**

Coding Challenges

Problem Statement:

1.Getting a message printed through Applet.

2. AppletDemo

3. Write C Program to create Singly Liked List with n elements and reverse the elements

4. Write a Java Program to Demonstrate a Basic Calculator using Applet

5.Write a C program to construct a singly linked list by removing duplicate elements in the sorted linked list

6. Write a java program to implement round robin scheduling algorithm.Calculate AVG WT AND TAT.

7. write a simple applet java program to check whether the given number is armstrong number or not

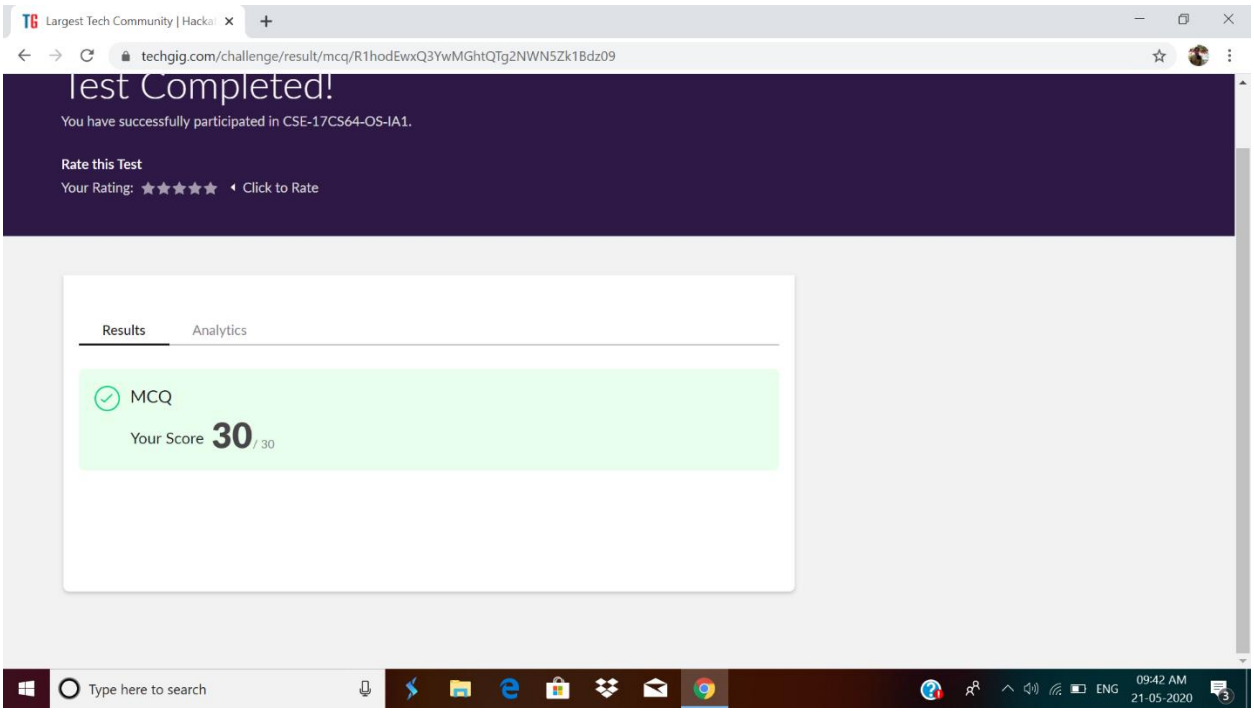
Status: completed

Uploaded the report in Github	**Yes**
If yes Repository name	https://github.com/anvithapo99/REPORT4

Uploaded the report in slack	**Yes**

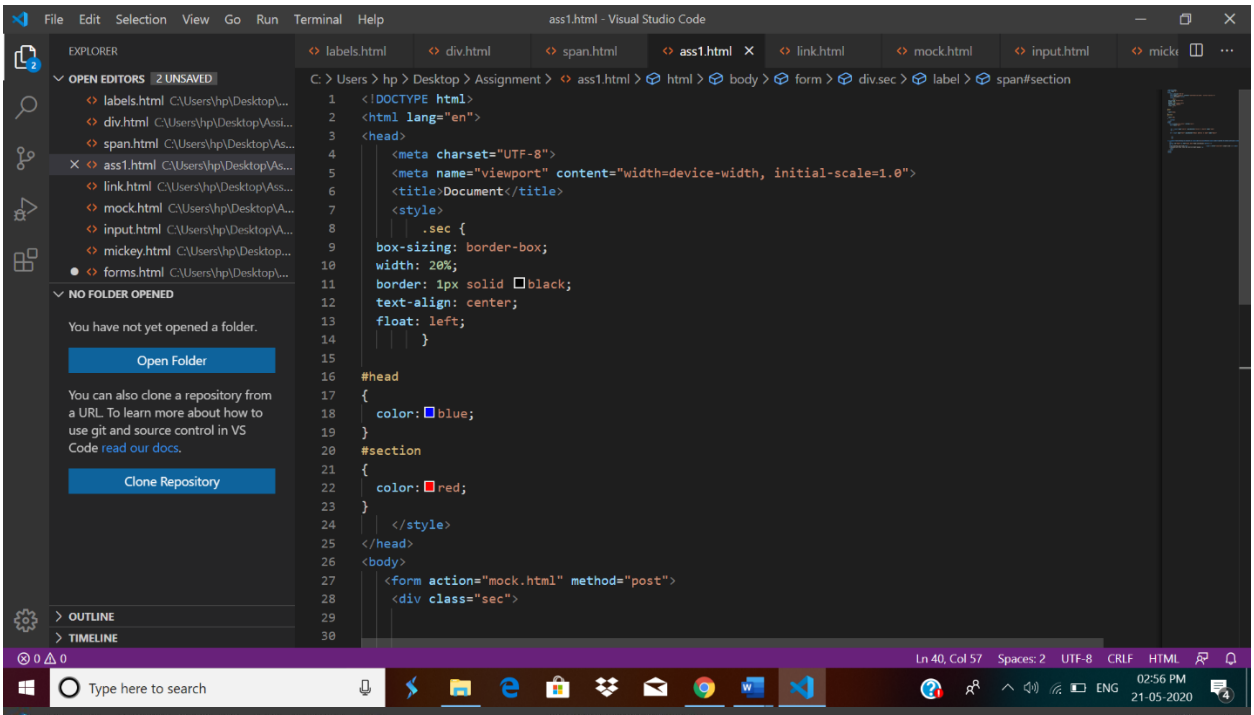
Online test details:

Subject:OS



Certification course details:

Today I have studied Relationship between elements .Then I completed the assignment on front end development assignment using HTML.


File Edit Selection View Go Run Terminal Help
ass1.html - Visual Studio Code
EXPLORER
OPEN EDITORS 2 UNSAVED
labels.html C:\Users\hp\Desktop\...
div.html C:\Users\hp\Desktop\Assi...
span.html C:\Users\hp\Desktop\As...
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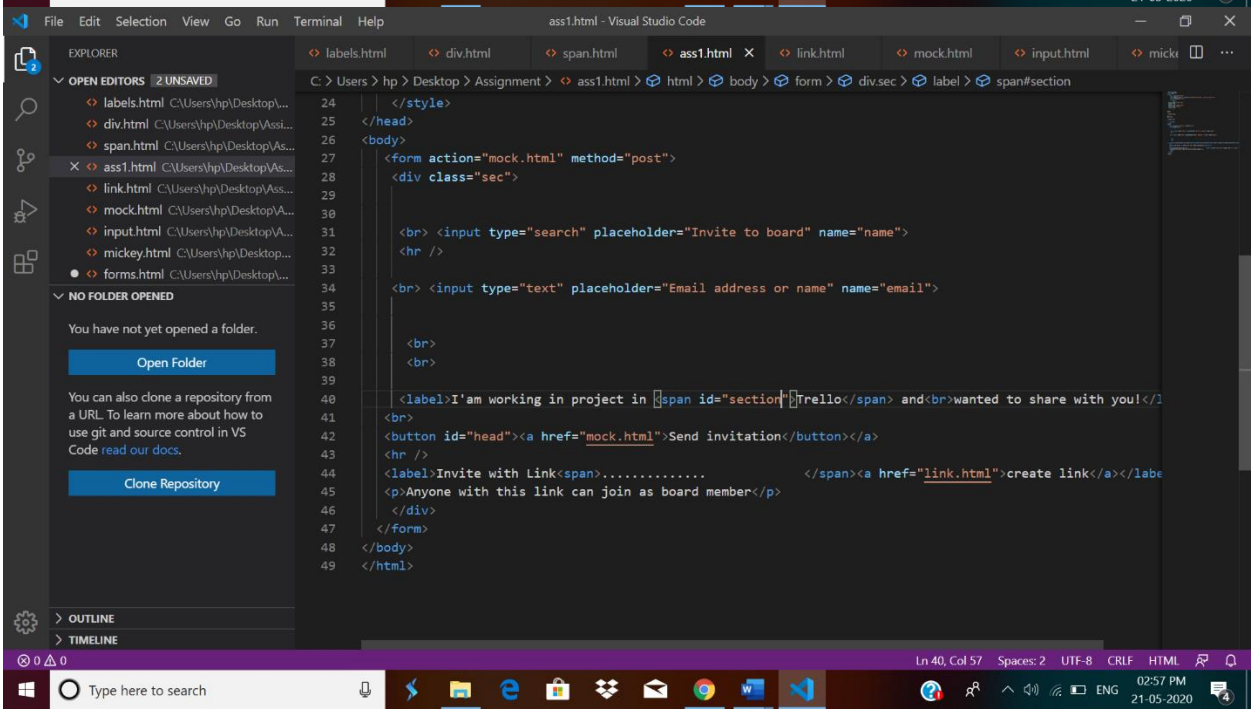
input.html C:\Users\hp\Desktop\A...
mickey.html C:\Users\hp\Desktop...
forms.html C:\Users\hp\Desktop\...
NO FOLDER OPENED
You have not yet opened a folder.
Open Folder
You can also clone a repository from a URL. To learn more about how to use git and source control in VS Code read our docs.
Clone Repository
OUTLINE
TIMELINE
labels.html
div.html
span.html
ass1.html
link.html
mock.html
input.html
C: > Users > hp > Desktop > Assignment > ass1.html > html > body > form > div.sec > label > span#section
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Document</title>
<style>
.sec {
box-sizing: border-box;
width: 20%;
border: 1px solid black;
text-align: center;
float: left;
}
#head
{
color: blue;
}
#section
{
color: red;
}
</style>
</head>
<body>
<form action="mock.html" method="post">

Ln 40, Col 57 Spaces: 2 UTF-8 CRLF HTML
Type here to search
ENG
02:56 PM
21-05-2020


File Edit Selection View Go Run Terminal Help
ass1.html - Visual Studio Code
EXPLORER
OPEN EDITORS 2 UNSAVED
labels.html C:\Users\hp\Desktop\...
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mock.html C:\Users\hp\Desktop\A...
input.html C:\Users\hp\Desktop\A...
mickey.html C:\Users\hp\Desktop...
forms.html C:\Users\hp\Desktop\...
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OUTLINE
TIMELINE
labels.html
div.html
span.html
ass1.html
link.html
mock.html
input.html
C: > Users > hp > Desktop > Assignment > ass1.html > html > body > form > div.sec > label > span#section
</style>
</head>
<body>
<form action="mock.html" method="post">

 <input type="search" placeholder="Invite to board" name="name">
<hr />

 <input type="text" placeholder="Email address or name" name="email">

<label>I'am working in project in Trello and
wanted to share with you!</l

<button id="head">Send invitation</button>
<hr />
<label>Invite with Link.....create link</labe
Anyone with this link can join as board member

</form>
</body>
</html>
Ln 40, Col 57 Spaces: 2 UTF-8 CRLF HTML
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ENG
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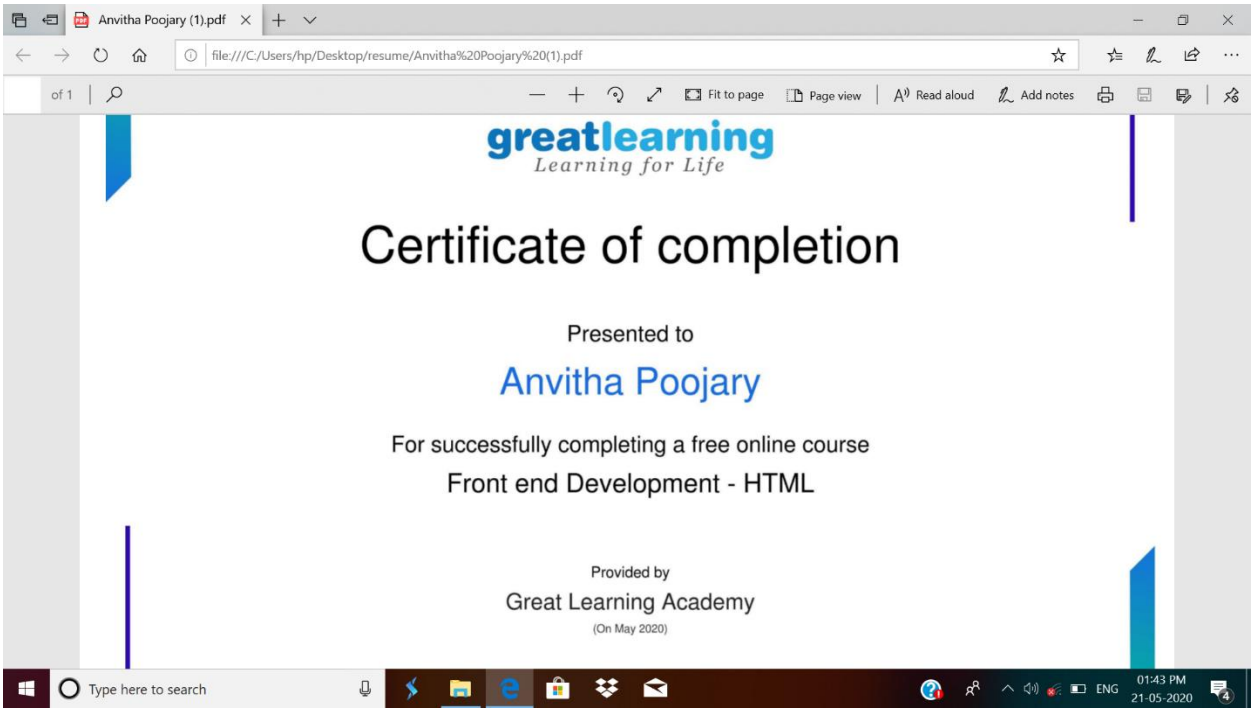
21-05-2020



Coding Challenges Details:

1.Getting a message printed through Applet

```
import java.awt.*;
import java.applet.*;
public class AppletDemo
{
    public void paint(Graphics g)
    {
        g.drawString("Welcome to TutorialRide", 50, 50);
    }
}
```

//AppletDemo.html

```
<html>
    <head>
        <title> AppletDemo </title>
    </head>
    <body>
        <applet code="AppletDemo.class" width="200" height="250">
```

```
        </applet>
    </body>
</html>
```

2. <title> AppletDemo </title>

```
import java.applet.*;

import java.awt.*;

 public class Simple extends Applet {

   public void paint (Graphics g) {

      g.drawString ("A Simple Applet", 20, 20);

   }

}
```

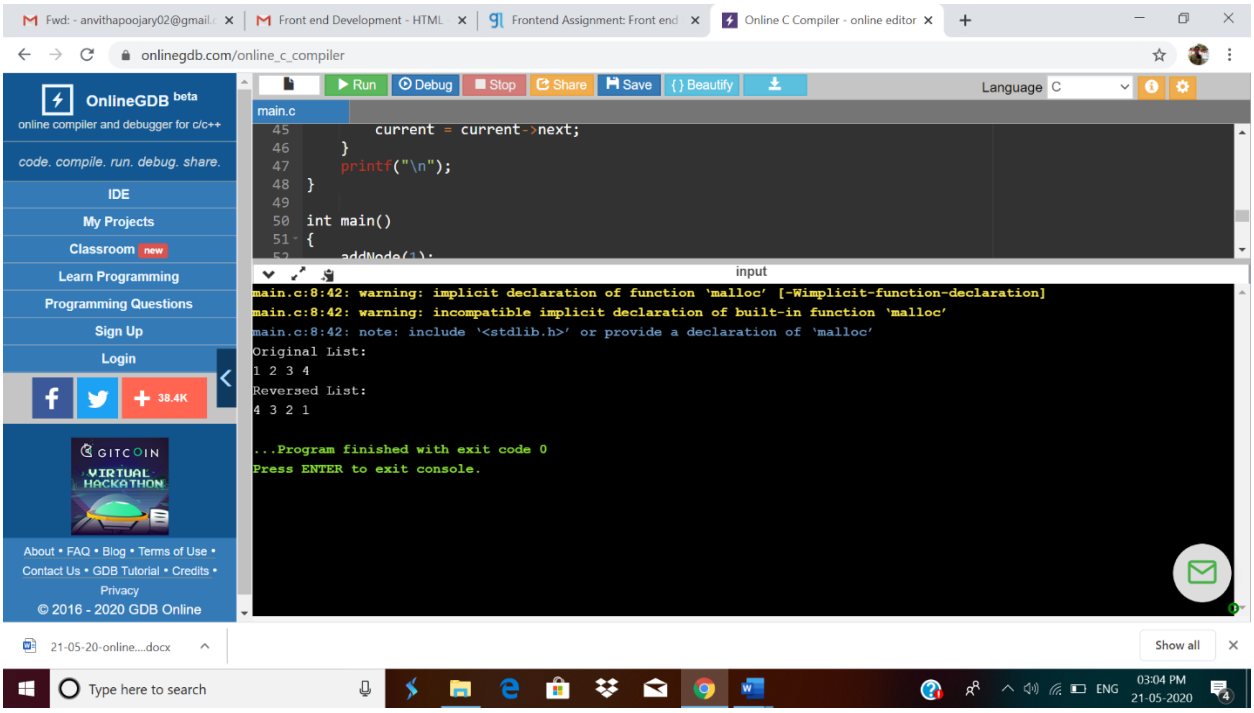
3. Write C Program to create Singly Liked List with n elements and reverse the elements

```
#include <stdio.h>

struct node{

   int data;

   struct node *next;

};

struct node *head, *tail = NULL;

void addNode(int data) {

   struct node *newNode = (struct node*)malloc(sizeof(struct node));

   newNode->data = data;

   newNode->next = NULL;

   if(head == NULL) {

      head = newNode;

      tail = newNode;

   }

   else {
```

```
      tail->next = newNode;
      tail = newNode;
   }
}

void reverse(struct node *current) {
   if(head == NULL) {
      printf("List is empty\n");
      return;
   }
   else{
      if(current->next == NULL) {
         printf("%d ", current->data);
         return;
      }
      reverse(current->next);
      printf("%d ", current->data);
   }
}

void display() {
   struct node *current = head;

   if(head == NULL) {
      printf("List is empty\n");
      return;
   }
   while(current != NULL) {
      printf("%d ", current->data);
```

```
        current = current->next;
    }
    printf("\n");
}

int main()
{
    addNode(1);
    addNode(2);
    addNode(3);
    addNode(4);

    printf("Original List: \n");
    display();

    printf("Reversed List: \n");
    reverse(head);
  return 0;
}
```

Output:



4. Write a Java Program to Demonstrate a Basic Calculator using Applet

Problem Description
We have to write a program in Java such that it creates a calculator which allows basic operations of addition, subtraction, multiplication and division.

Expected Input and Output
For creating a calculator, we can have the following different sets of input and output.

To Perform Addition :
When the addition expression "58+10" is typed,
it is expected that the result is displayed as "58+10=68.0".
2. To Perform Subtraction :

When the subtraction expression "100.0-28.25" is typed,
it is expected that the result is displayed as "100.0-28.25=71.75".
3. To Perform Multiplication :

When an multiplication expression "113.65*39" is typed,*
*it is expected that the result is displayed as "113.65*39=4432.35".
4. To Perform Division : When the denominator is non-zero

When an division expression "25126.0/3" is typed,
it is expected that the result is displayed as "25126.0/3=8375.33".
5. To Perform Division : When the denominator is zero

When an division expression "169.0/0" is typed,
it is expected that the error is displayed as "169.0/0=Zero Divison Error".

```
import java.awt.*;
import java.applet.*;
import java.awt.event.*;
public class Calculator extends Applet implements ActionListener
{
   TextField inp;
   public void init()
   {
    setBackground(Color.white);
    setLayout(null);
    int i;
    inp = new TextField();
    inp.setBounds(150,100,270,50);
    this.add(inp);
    Button button[] = new Button[10];
    for(i=0;i<10;i++)
    {
       button[i] = new Button(String.valueOf(9-i));
       button[i].setBounds(150+((i%3)*50),150+((i/3)*50),50,50);
       this.add(button[i]);
       button[i].addActionListener(this);
    }
    Button dec=new Button(".");
    dec.setBounds(200,300,50,50);
    this.add(dec);
```

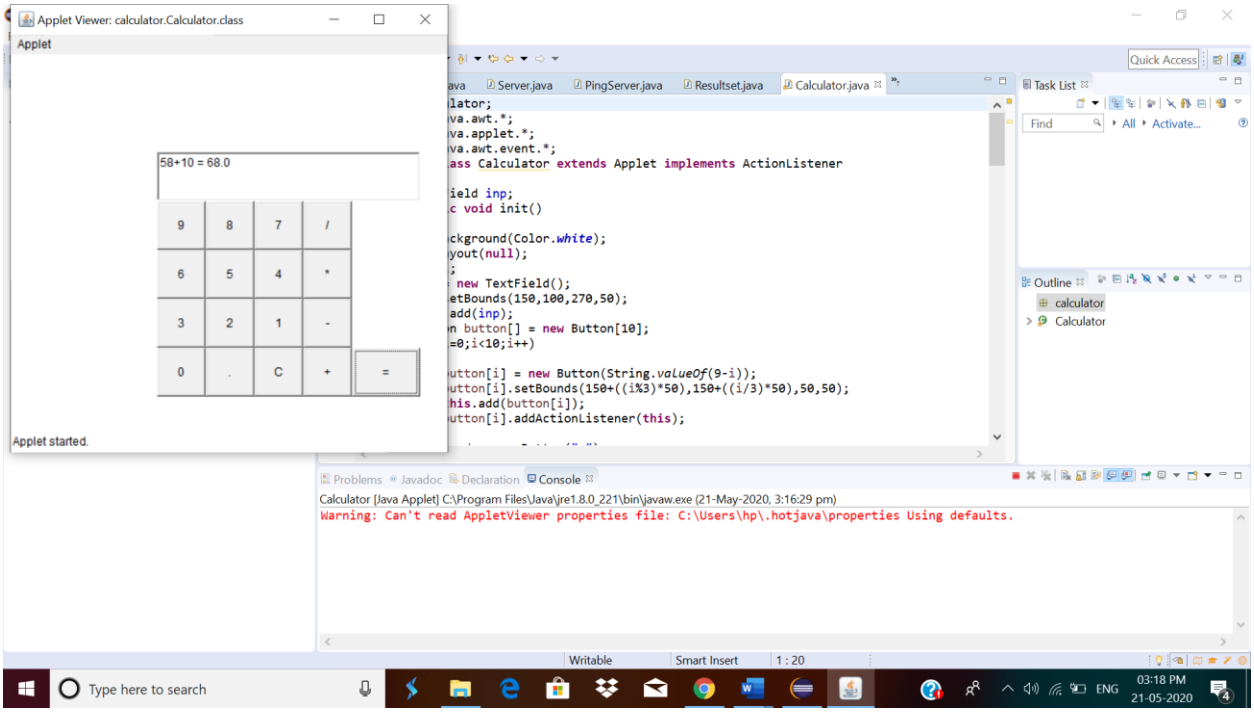
```
 dec.addActionListener(this);

 Button clr=new Button("C");
 clr.setBounds(250,300,50,50);
 this.add(clr);
 clr.addActionListener(this);

 Button operator[] = new Button[5];
 operator[0]=new Button("/");
 operator[1]=new Button("*");
 operator[2]=new Button("-");
 operator[3]=new Button("+");
 operator[4]=new Button("=");
 for(i=0;i<4;i++)
 {
    operator[i].setBounds(300,150+(i*50),50,50);
    this.add(operator[i]);
    operator[i].addActionListener(this);
 }
 operator[4].setBounds(350,300,70,50);
 this.add(operator[4]);
 operator[4].addActionListener(this);
}
String num1="";
String op="";
String num2="";
//Function to calculate the expression
public void actionPerformed(ActionEvent e)
{
```

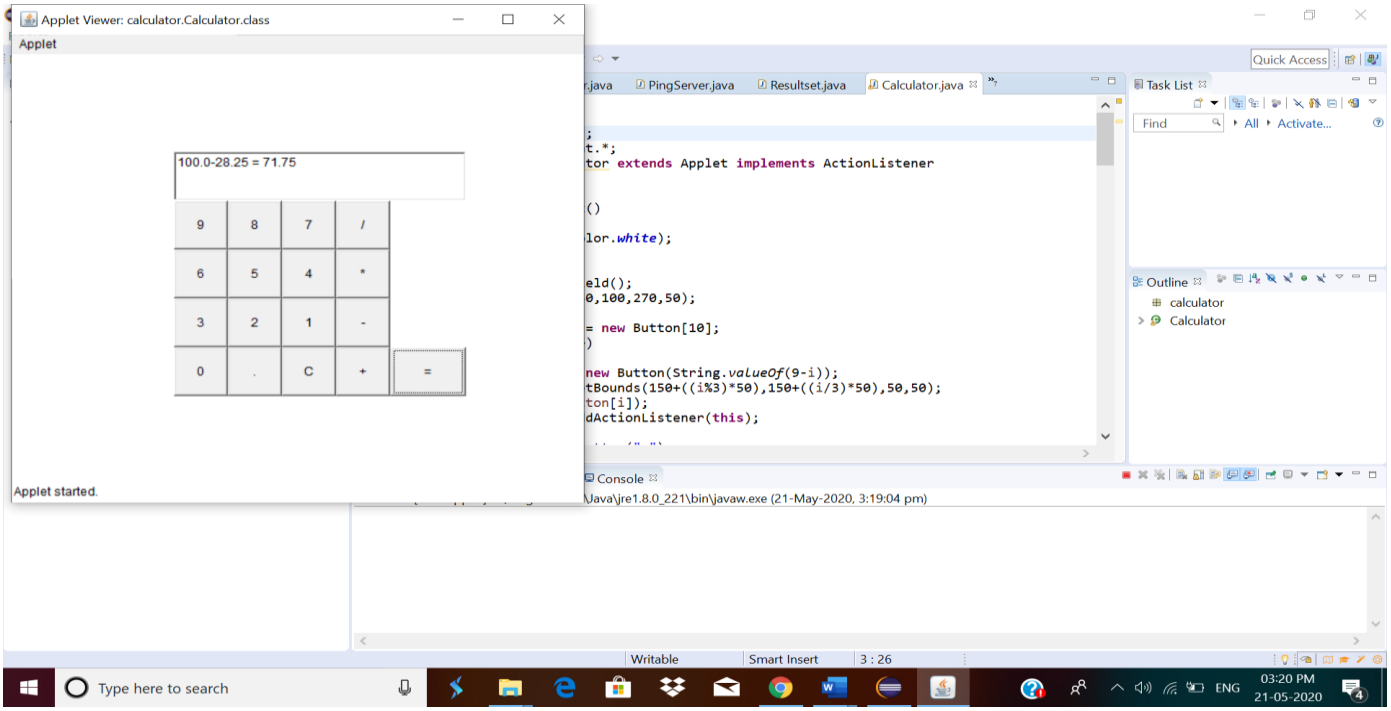
```
String button = e.getActionCommand();
  char ch = button.charAt(0);
if(ch>='0' && ch<='9'|| ch=='.')
{
   if (!op.equals(""))
         num2 = num2 + button;
   else
         num1 = num1 + button;
   inp.setText(num1+op+num2);
}
else if(ch=='C')
{
   num1 = op = num2 = "";
   inp.setText("");
}
else if (ch =='=')
{
   if(!num1.equals("") && !num2.equals(""))
   {
         double temp;
         double n1=Double.parseDouble(num1);
         double n2=Double.parseDouble(num2);
         if(n2==0 && op.equals("/"))
         {
            inp.setText(num1+op+num2+" = Zero Division Error");
            num1 = op = num2 = "";
         }
         else
         {
```

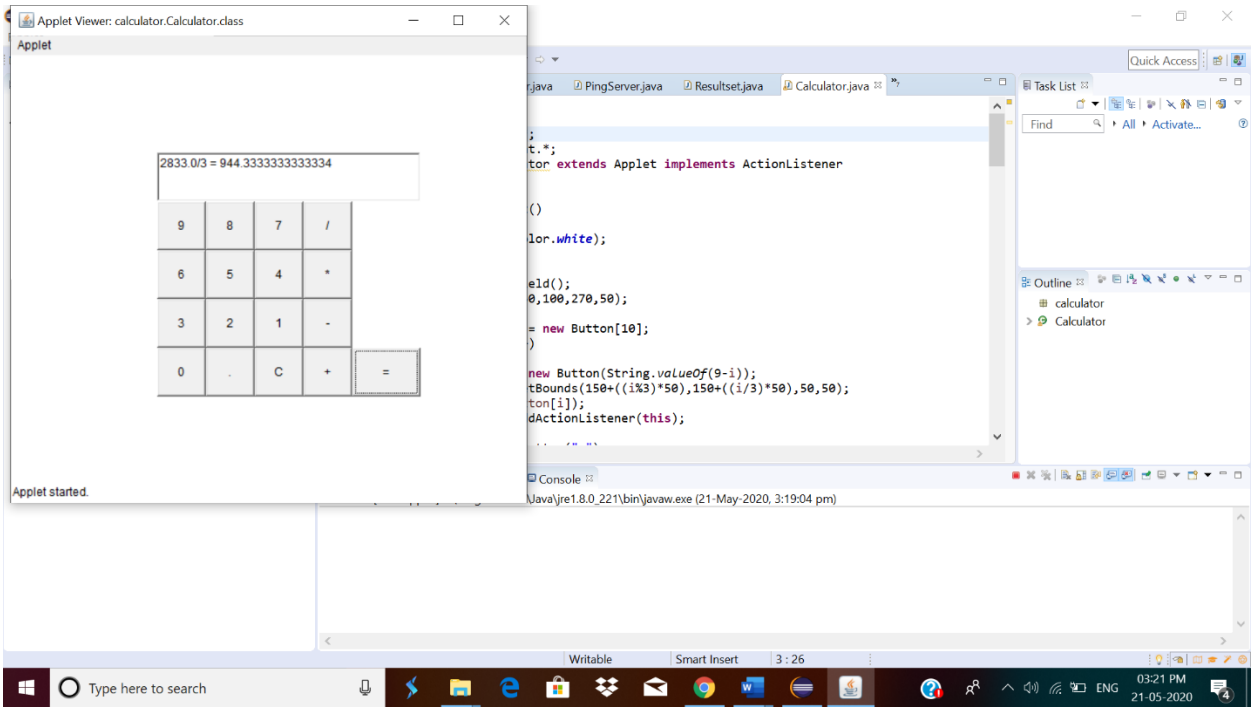
```
            if (op.equals("+"))
                temp = n1 + n2;
            else if (op.equals("-"))
                temp = n1 - n2;
            else if (op.equals("/"))
                temp = n1/n2;
            else
                temp = n1*n2;
            inp.setText(num1+op+num2+" = "+temp);
            num1 = Double.toString(temp);
            op = num2 = "";
       }
      }
    else
    {
          num1 = op = num2 = "";
          inp.setText("");
    }
  }
else
{
    if (op.equals("") || num2.equals(""))
          op = button;
    else
    {
          double temp;
          double n1=Double.parseDouble(num1);
          double n2=Double.parseDouble(num2);
          if(n2==0 && op.equals("/"))
```

```
            {
               inp.setText(num1+op+num2+" = Zero Division Error");
               num1 = op = num2 = "";
            }
            else
            {
               if (op.equals("+"))
                  temp = n1 + n2;
               else if (op.equals("-"))
                  temp = n1 - n2;
               else if (op.equals("/"))
                  temp = n1/n2;
               else
                  temp = n1*n2;
               num1 = Double.toString(temp);
               op = button;
               num2 = "";
          }
         }
       inp.setText(num1+op+num2);
      }
   }
}
```

Output:


Applet Viewer: calculator.Calculator.class
Applet
58+10 = 68.0
9 8 7 /
6 5 4 *
3 2 1 -
0 . C + =
Applet started.
Server.java
PingServer.java
Resultset.java
Calculator.java
Quick Access
Task List
Find
All
Activate...
Outline
calculator
Calculator
Problems
Javadoc
Declaration
Console
Calculator [Java Applet] C:\Program Files\Java\jre1.8.0_221\bin\javaw.exe (21-May-2020, 3:16:29 pm)
Warning: Can't read AppletViewer properties file: C:\Users\hp\.hotjava\properties Using defaults.
Writable
Smart Insert
1 : 20
Type here to search
ENG
03:18 PM
21-05-2020


Applet Viewer: calculator.Calculator.class
Applet
100.0-28.25 = 71.75
9 8 7 /
6 5 4 *
3 2 1 -
0 . C + =
Applet started.
PingServer.java
Resultset.java
Calculator.java
Quick Access
Task List
Find
All
Activate...
Outline
calculator
Calculator
Console
\Java\jre1.8.0_221\bin\javaw.exe (21-May-2020, 3:19:04 pm)
Writable
Smart Insert
3 : 26
Type here to search
ENG
03:20 PM
21-05-2020


Applet Viewer: calculator.Calculator.class
Applet
2833.0/3 = 944.3333333333334
9 8 7 /
6 5 4 *
3 2 1 -
0 . C + =
Applet started.
Quick Access
PingServer.java
Resultset.java
Calculator.java
Task List
Find
All
Activate...
Outline
calculator
Calculator
Console
Writable
Smart Insert
3 : 26
Type here to search
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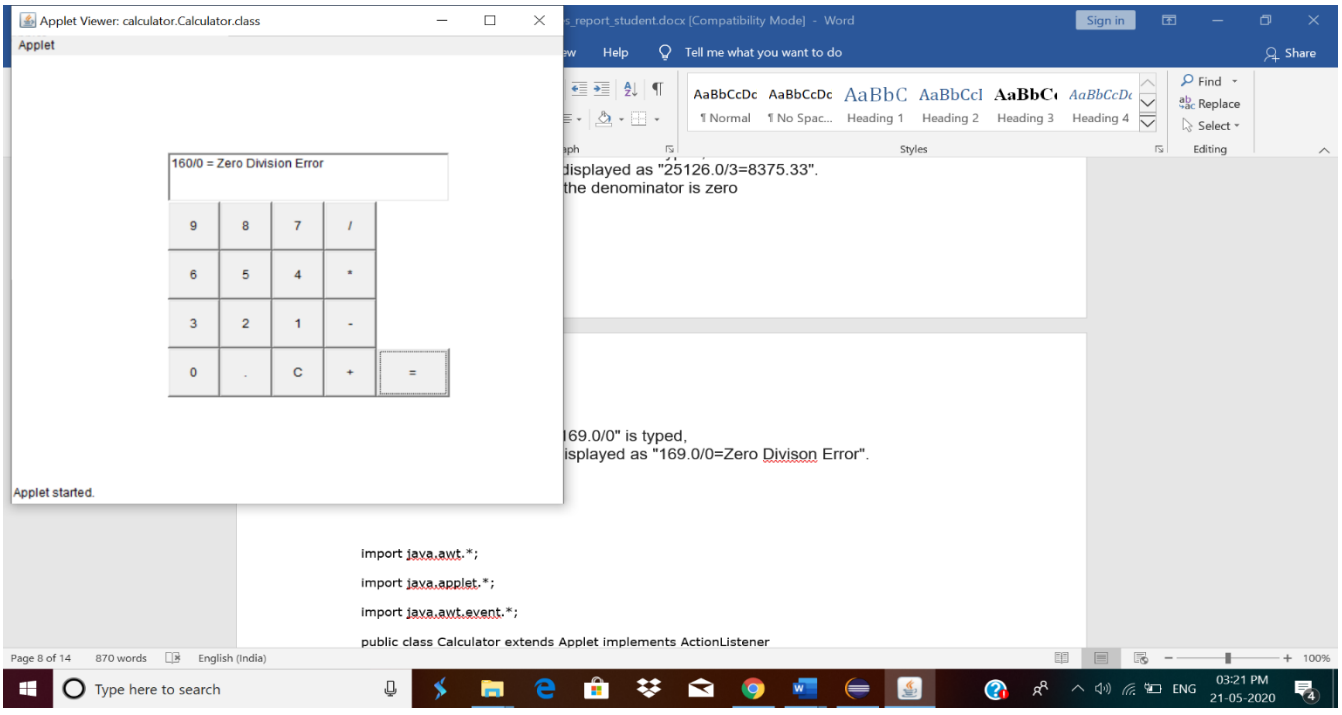
21-05-2020


Applet Viewer: calculator.Calculator.class
Applet
160/0 = Zero Division Error
9 8 7 /
6 5 4 *
3 2 1 -
0 . C + =
Applet started.
Sign in
Help
Tell me what you want to do
Share
Normal
No Spac...
Heading 1
Heading 2
Heading 3
Heading 4
Styles
Find
Replace
Select
Editing
displayed as "25126.0/3=8375.33".
the denominator is zero
169.0/0" is typed,
isplayed as "169.0/0=Zero Divison Error".
import java.awt.*;
import java.applet.*;
import java.awt.event.*;
public class Calculator extends Applet implements ActionListener
Page 8 of 14
870 words
English (India)
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ENG
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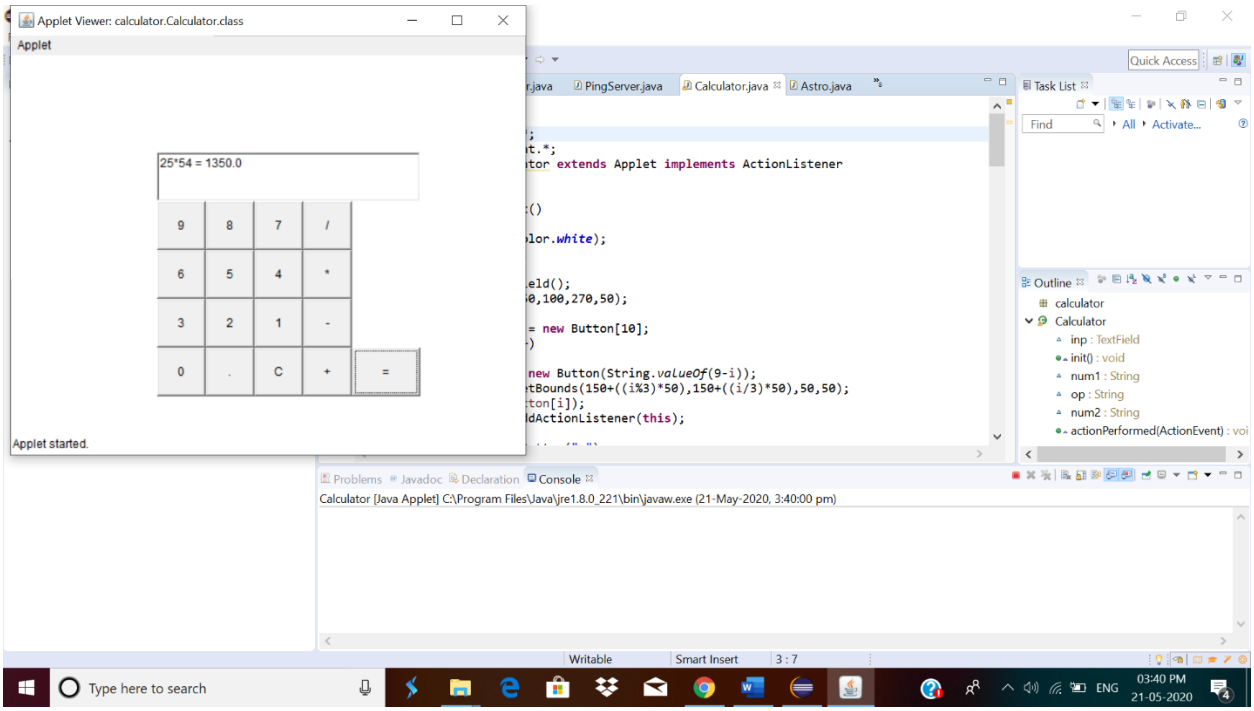
21-05-2020



5.Write a C program to construct a singly linked list by removing duplicate elements in the sorted linked list

Description:

Take a sorted list and traverse the list. Compare the current node element with next adjacent node. If it is same then delete second element, if not retain. Finally print the resulting list.

Sample output:

Given list {1,2,2,3,3,3,4}

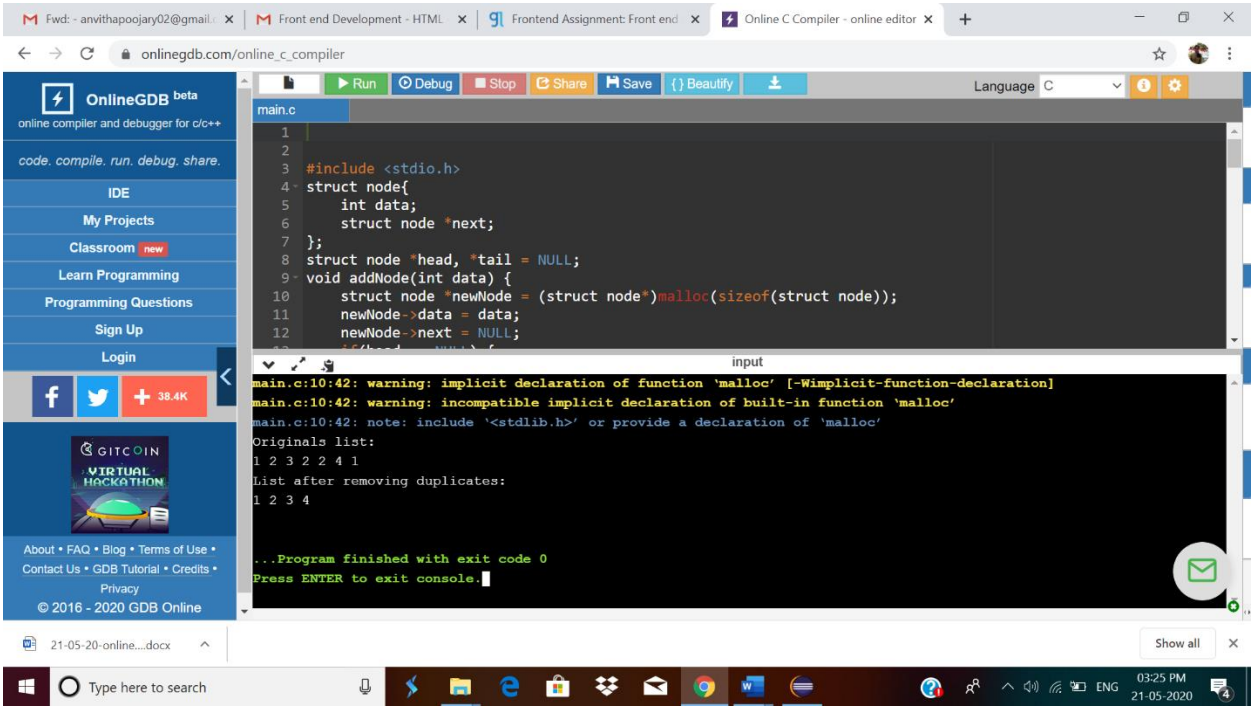
Resulting list{1,2,3,4}

```
#include <stdio.h>

struct node{

    int data;

    struct node *next;

};

struct node *head, *tail = NULL;

void addNode(int data) {

    struct node *newNode = (struct node*)malloc(sizeof(struct node));

    newNode->data = data;
```

```
    newNode->next = NULL;
    if(head == NULL) {

        head = newNode;
        tail = newNode;
    }
    else {
        tail->next = newNode;
        tail = newNode;
    }
}

void removeDuplicate() {
    struct node *current = head, *index = NULL, *temp = NULL;

    if(head == NULL) {
        return;
    }
    else {
        while(current != NULL){
            temp = current;
            index = current->next;

            while(index != NULL) {
                if(current->data == index->data)
                {
                    temp->next = index->next;
                }
                else {
```

```
            temp = index;
         }
         index = index->next;
      }
      current = current->next;
   }
  }
}

void display() {
   struct node *current = head;
   if(head == NULL) {
      printf("List is empty \n");
      return;
   }
   while(current != NULL) {
      printf("%d ", current->data);
      current = current->next;
   }
   printf("\n");
}

int main()
{
   addNode(1);
   addNode(2);
   addNode(3);
   addNode(2);
```

```
    addNode(2);
    addNode(4);
    addNode(1);

    printf("Originals list: \n");
    display();
    removeDuplicate();

    printf("List after removing duplicates: \n");
    display();

    return 0;
}
```



6. Write a java program to implement round robin scheduling algorithm.Calculate AVG WT AND TAT.

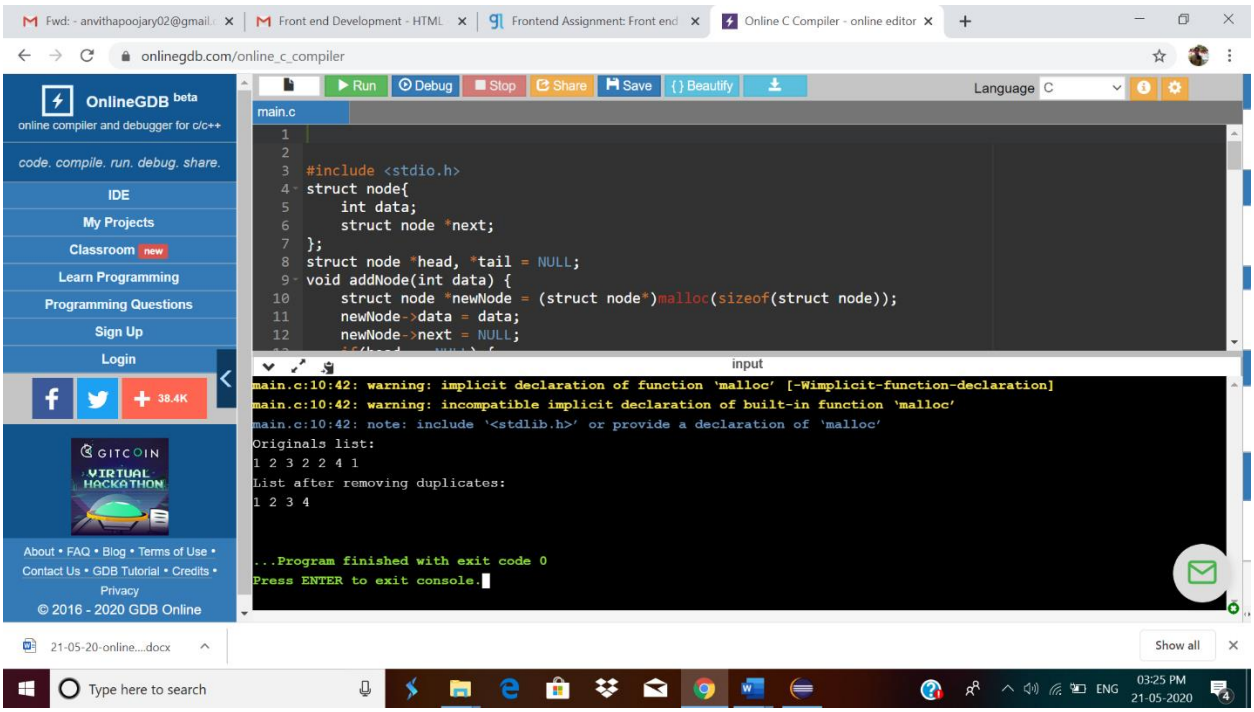
```
public class Main
```

```
{
    static void findWaitingTime(int processes[], int n,
                int bt[], int wt[], int quantum)
    {
        int rem_bt[] = new int[n];
        for (int i = 0 ; i < n ; i++)
            rem_bt[i] =  bt[i];

        int t = 0;
        while(true)
        {
            boolean done = true;
            for (int i = 0 ; i < n; i++)
            {
                if (rem_bt[i] > 0)
                {
                    done = false;

                    if (rem_bt[i] > quantum)
                    {
                        t += quantum;
                        rem_bt[i] -= quantum;
                    }
                    else
                {
                        t = t + rem_bt[i];
                        wt[i] = t - bt[i];
                        rem_bt[i] = 0;
                    }
```

```
            }
        }
        if (done == true)
          break;
    }
}
static void findTurnAroundTime(int processes[], int n,
                        int bt[], int wt[], int tat[])
{
    for (int i = 0; i < n ; i++)
        tat[i] = bt[i] + wt[i];
}
static void findavgTime(int processes[], int n, int bt[],
                                    int quantum)
{
    int wt[] = new int[n], tat[] = new int[n];
    int total_wt = 0, total_tat=0;
    findWaitingTime(processes, n, bt, wt, quantum);
    findTurnAroundTime(processes, n, bt, wt, tat);
    System.out.println("Processes " + " Burst time " +
                " Waiting time " + " Turn around time");
    for (int i=0; i<n; i++)
    {
        total_wt = total_wt + wt[i];
        total_tat = total_tat + tat[i];
        System.out.println(" " + (i+1) + "\t\t" + bt[i] +"\t " +
                        wt[i] +"\t\t " + tat[i]);
    }
```

```
        System.out.println("Average waiting time = " +
                           (float)total_wt / (float)n);
        System.out.println("Average turn around time = " +
                            (float)total_tat / (float)n);
    }
    public static void main(String[] args)
    {
        int processes[] = { 1, 2, 3};
        int n = processes.length;
        int burst_time[] = {10, 5, 8};
        int quantum = 2;
        findavgTime(processes, n, burst_time, quantum);
    }
}
```

Output:



7. write a simple applet java program to check whether the given number is armstrong number or not

Description

Armstrong Number :A positive number is called armstrong number if it is equal to the sum of cubes of its digits for example 0, 1, 153, 370, 371, 407 etc.

Let's try to understand why 153 is an Armstrong number.
153 = (1*1*1)+(5*5*5)+(3*3*3)
where:
(1*1*1)=1
(5*5*5)=125
(3*3*3)=27
So:
1+125+27=153

```
import java.util.Scanner;

public class Astro {


   public static void main(String[] args) {


      int num, number, temp, total = 0;

      System.out.println("Ënter 3 Digit Number");

      Scanner scanner = new Scanner(System.in);

      num = scanner.nextInt();

      scanner.close();

      number = num;


      for( ;number!=0;number /= 10)

      {

         temp = number % 10;

         total = total + temp*temp*temp;

      }
```

```
        if(total == num)
            System.out.println(num + " is an Armstrong number");
        else
            System.out.println(num + " is not an Armstrong number");
    }
}
```

Output: