Session 3

Assignment

1. Write a java program to show the use of super and this keyword with a constructor, methods and variables.

Constructors:

Program code:

```
class Teacher extends School
{
Teacher()
{
    super();
    System.out.println("The total number of teacher in school is 45");
}
}
class School
{
    School()
{
    System.out.println("The name of school is Excellent");
}
}
class show
{
    public static void main(String[] args)
{
        Teacher t = new Teacher();
}
}
```

Program Flow:

- 1.A base class Techer is taken which has the statement to be displayed.
- 2.A sub class school is taken to which has the statement to be displayed
- 3.A drive class show is taken to execute these two class.
- 4. The class file show. java is executed to get these two output.

Java & Class files:













Program Output:

Command Prompt

```
Microsoft Windows [Version 10.0.17134.407]
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C:\Users\SAmutha>cd\

C:\>cd c:\JPrgm

c:\JPrgm>javac show.java

c:\JPrgm>java show

The name of school is Excellent

The total number of teacher in school is 45

c:\JPrgm>
```

2. Variables

Program Code:

```
class employee
{
  int wt = 8;

public static void main(String[] args)
{
  }
} class clerk extends employee
{
  int wt = 10;
  void display()
{
   System.out.println(super.wt);
}
  public static void main (String[] args)
{
   clerk c= new clerk();
   c.display();
}
}
```

Java & Class file:

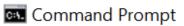








Program Output:



```
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C:\Users\SAmutha>cd\

C:\>cd c:\JPrgm

c:\JPrgm>javac clerk.java

c:\JPrgm>java clerk
8

c:\JPrgm>
```

2.Create a class Student which has some private data like name, phone number, roll number, class use getter and setter to access this private data.

Program code:

```
public class Student
{
private String name;
private int phonenumber;
private int rollnumber;
private int clss;
public String getname()
{return name;}
public int getphonenumber()
{return phonenumber;}
public int getrollnumber()
{return rollnumber;}
public int getclss()
```

```
{return clss;}
public void setname(String newValue)
{ name = newValue; }
public void setphonenumber(int newValue)
{ phonenumber = newValue;}
public void setrollnumber(int newValue)
{ rollnumber = newValue ;}
public void setclss(int newValue)
{ clss = newValue; }
public static void main(String[] args)
Student St = new Student();
St.setname("Amutha");
St.setphonenumber(253468);
St.setrollnumber(23);
St.setclss(3);
System.out.println("Name:"+ St.getname());
System.out.println("Phone number:"+ St.getphonenumber());
System.out.println("Roll number:"+ St.getrollnumber());
System.out.println("Class:"+ St.getclss());
} }
```

Java & Class file:





Student.java

Student.class

Program Output:

Command Prompt

```
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C:\Users\SAmutha>cd\

C:\>cd c:\JPrgm

c:\JPrgm>javac Student.java

c:\JPrgm>java Student

Name:Amutha
Phone number:253468

Roll number:23

Class:3

c:\JPrgm>
```