

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 Teacher 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 driver class show is taken to execute these two classes.
4. The class file show.java is executed to get these two outputs.

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:

```
Command Prompt

Microsoft Windows [Version 10.0.17134.407]
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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;}
```

```
{return cls;}
public void setname(String newValue)
{ name = newValue;}
public void setphonenumber(int newValue)
{ phonenumber = newValue;}
public void setrollnumber(int newValue)
{ rollnumber = newValue ;}
public void setcls(int newValue)
{ cls = newValue;}
public static void main(String[] args)
{
Student St = new Student();
St.setname("Amutha");
St.setphonenumber(253468);
St.setrollnumber(23);
St.setcls(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.getcls());
}}
```

Java & Class file:



Student.java



Student.class

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 Student.java
```

```
c:\JPrgm>java Student
```

```
Name:Amutha
```

```
Phone number:253468
```

```
Roll number:23
```

```
Class:3
```

```
c:\JPrgm>
```