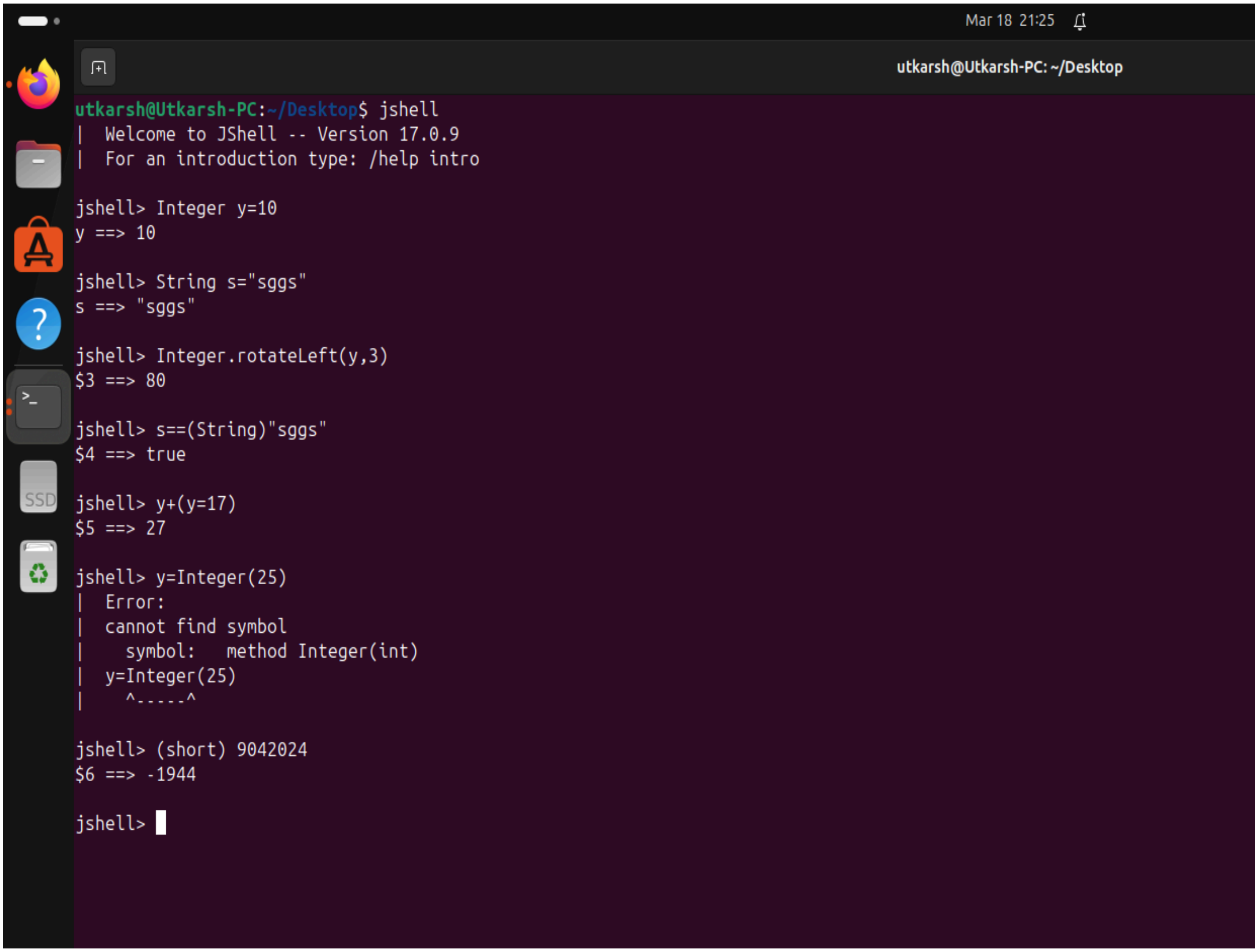
MIDTERM

Q1)Ans:



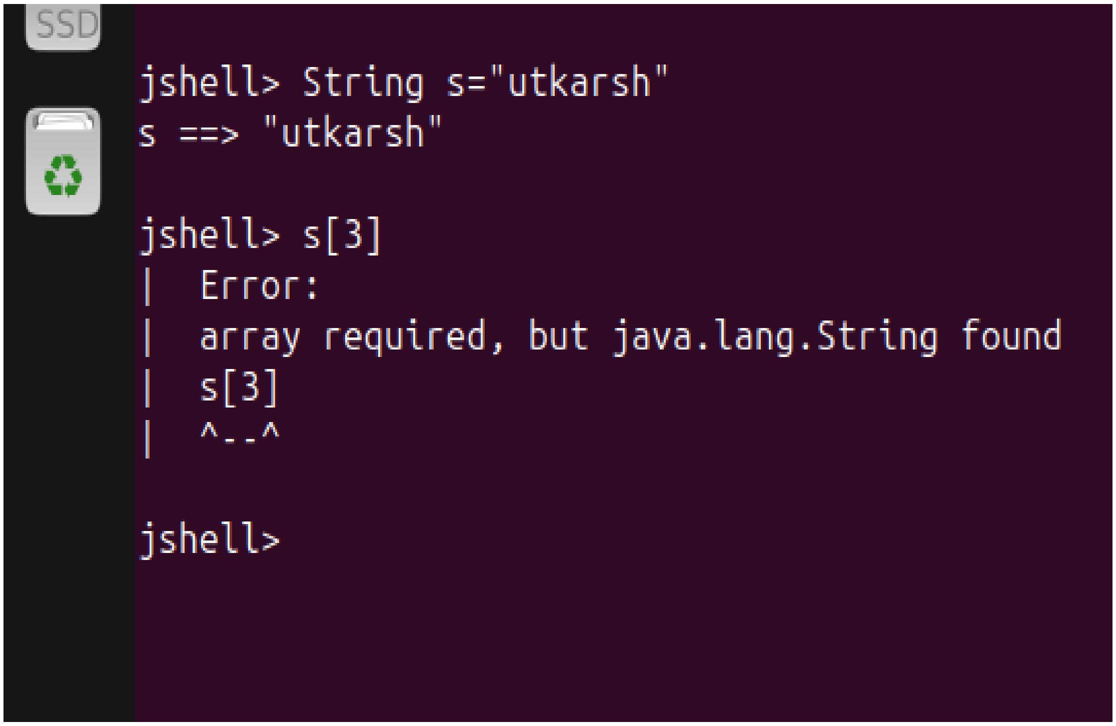
```
utkarsh@Utkarsh-PC:~/Desktop$ jshell
|  Welcome to JShell -- Version 17.0.9
|  For an introduction type: /help intro

jshell> Integer y=10
y ==> 10

jshell> String s="sggs"
s ==> "sggs"

jshell> Integer.rotateLeft(y,3)
$3 ==> 80

jshell> s==(String)"sggs"
$4 ==> true

jshell> y+(y=17)
$5 ==> 27

jshell> y=Integer(25)
|  Error:
|  cannot find symbol
|    symbol:   method Integer(int)
|  y=Integer(25)
|    ^-----^

jshell> (short) 9042024
$6 ==> -1944

jshell> 
```

Q2)

a)Ans:

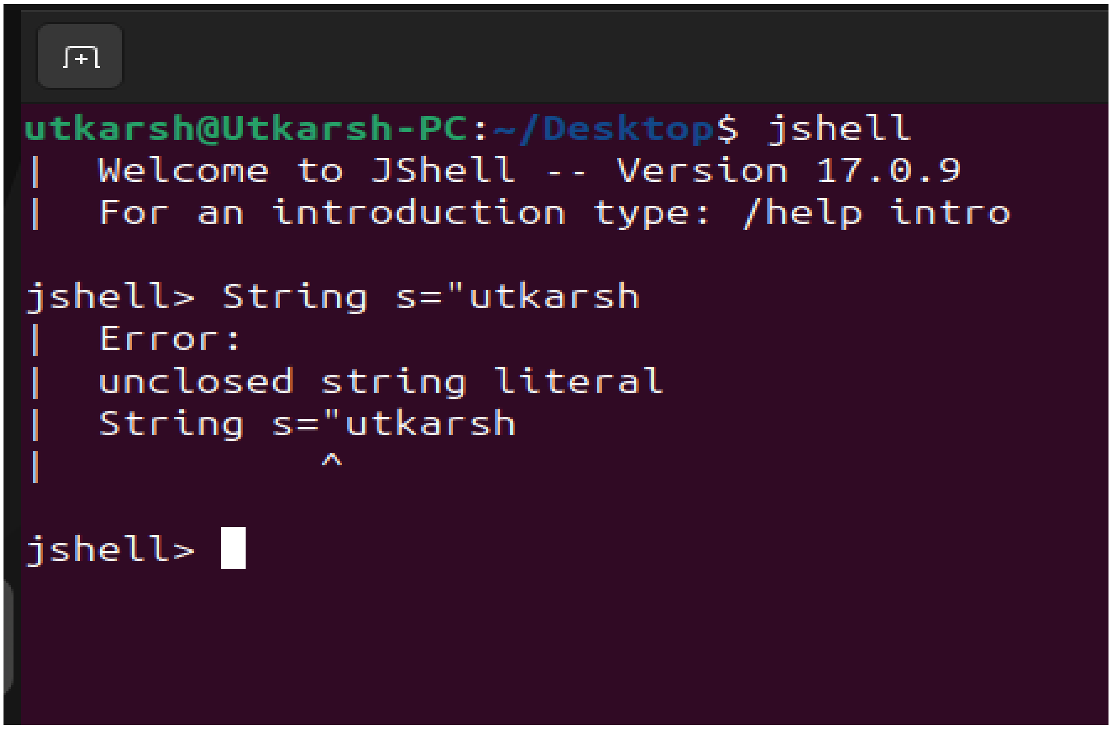
Incorrect class name,Incorrect file permission,Incorrect compilation error,missing.class file.

c)Ans:



```
jshell> String s="utkarsh"
s ==> "utkarsh"

jshell> s[3]
|  Error:
|  array required, but java.lang.String found
|  s[3]
|  ^--^

jshell>
```

b)Ans:

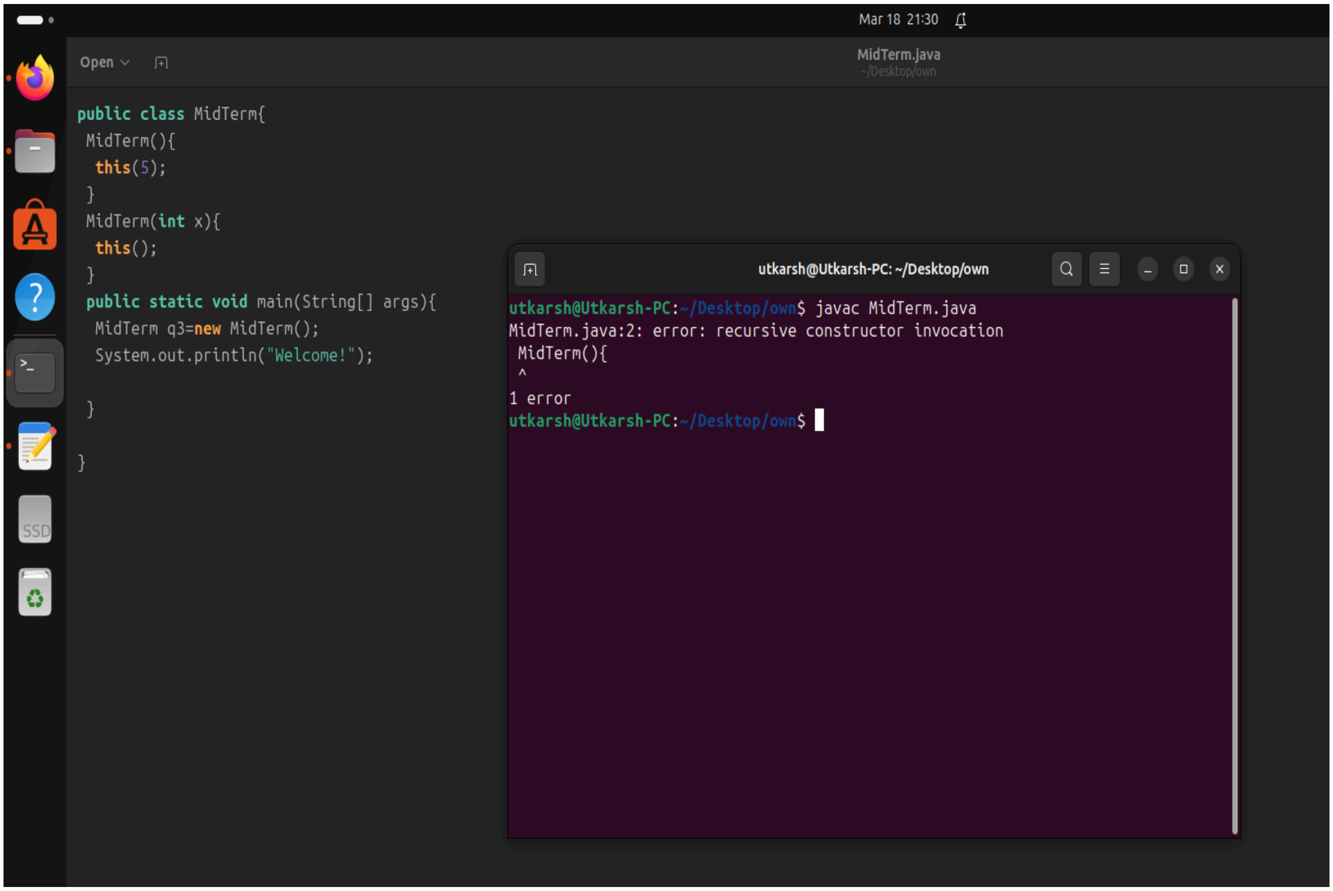


```
utkarsh@Utkarsh-PC:~/Desktop$ jshell
|  Welcome to JShell -- Version 17.0.9
|  For an introduction type: /help intro

jshell> String s="utkarsh
|  Error:
|  unclosed string literal
|  String s="utkarsh
|           ^

jshell>
```

Q3)Ans:

Javac // latest version // preview file.name

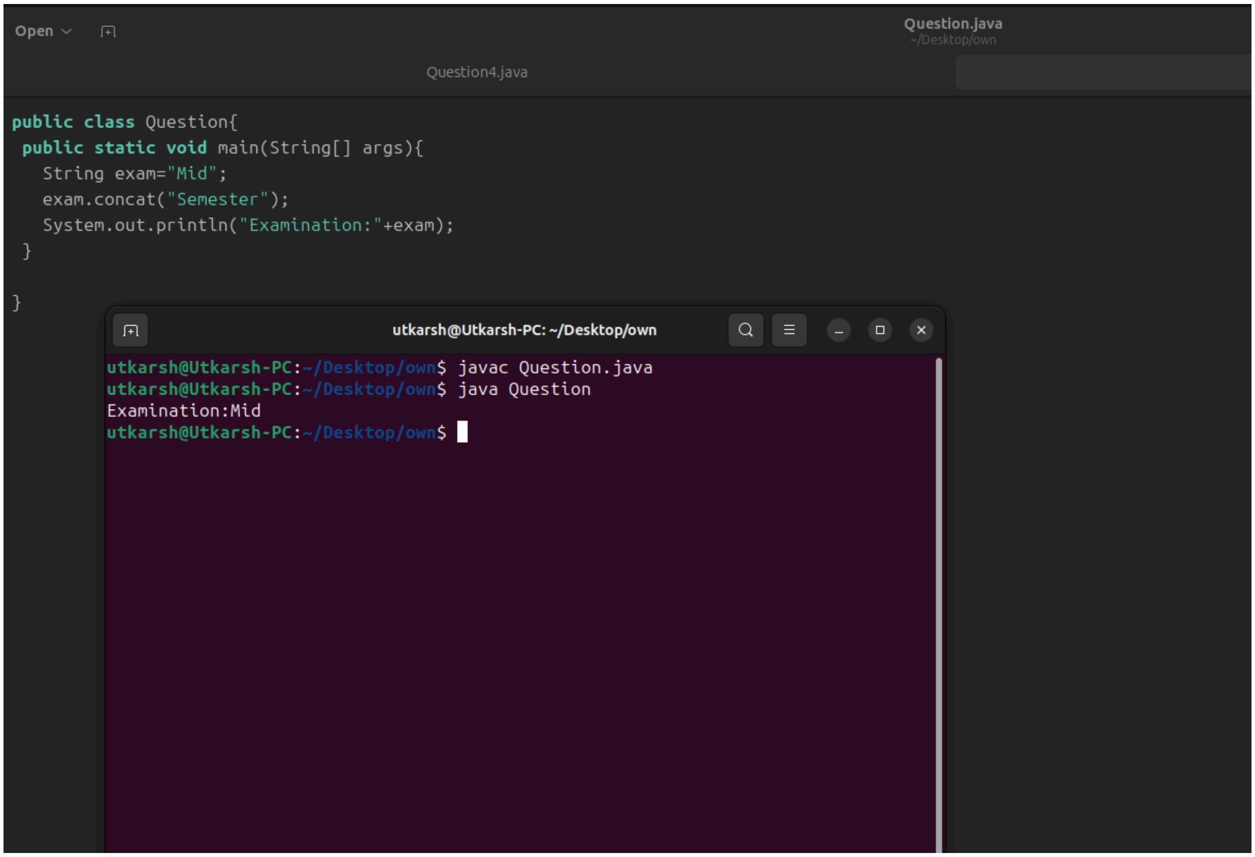
Q4)
a)Ans:



```
public class MidTerm{
 MidTerm(){
  this(5);
 }
 MidTerm(int x){
  this();
 }
 public static void main(String[] args){
  MidTerm q3=new MidTerm();
  System.out.println("Welcome!");

 }

}
```

```
utkarsh@Utkarsh-PC:~/Desktop/own$ javac MidTerm.java
MidTerm.java:2: error: recursive constructor invocation
 MidTerm(){
 ^
1 error
utkarsh@Utkarsh-PC:~/Desktop/own$
```

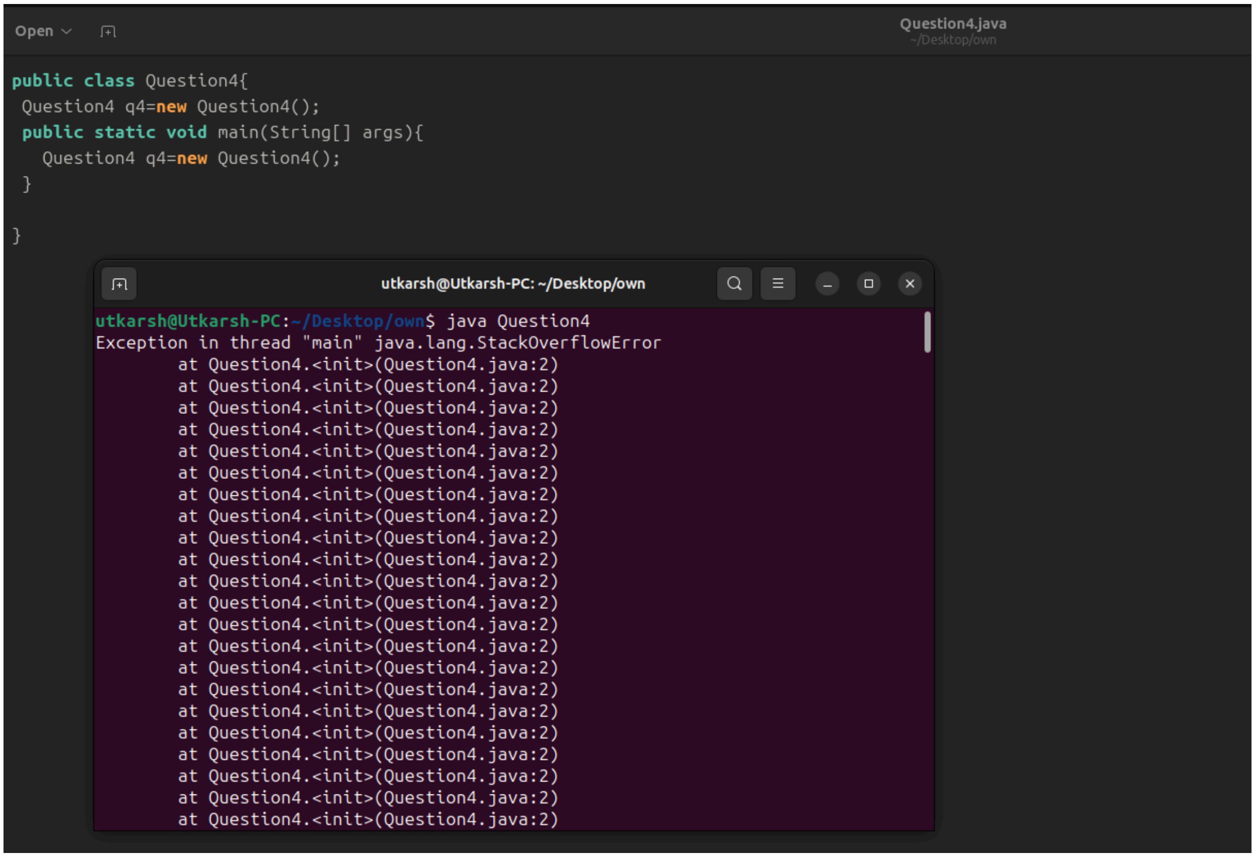
b)Ans:



```java
public class Question{
 public static void main(String[] args){
   String exam="Mid";
   exam.concat("Semester");
   System.out.println("Examination:"+exam);
 }

}
```

```
utkarsh@Utkarsh-PC:~/Desktop/own$ javac Question.java
utkarsh@Utkarsh-PC:~/Desktop/own$ java Question
Examination:Mid
utkarsh@Utkarsh-PC:~/Desktop/own$ 
```

c)Ans:



```
public class Question4{
 Question4 q4=new Question4();
 public static void main(String[] args){
   Question4 q4=new Question4();
 }

}
```

```
utkarsh@Utkarsh-PC:~/Desktop/own$ java Question4
Exception in thread "main" java.lang.StackOverflowError
        at Question4.<init>(Question4.java:2)
        at Question4.<init>(Question4.java:2)
        at Question4.<init>(Question4.java:2)
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```
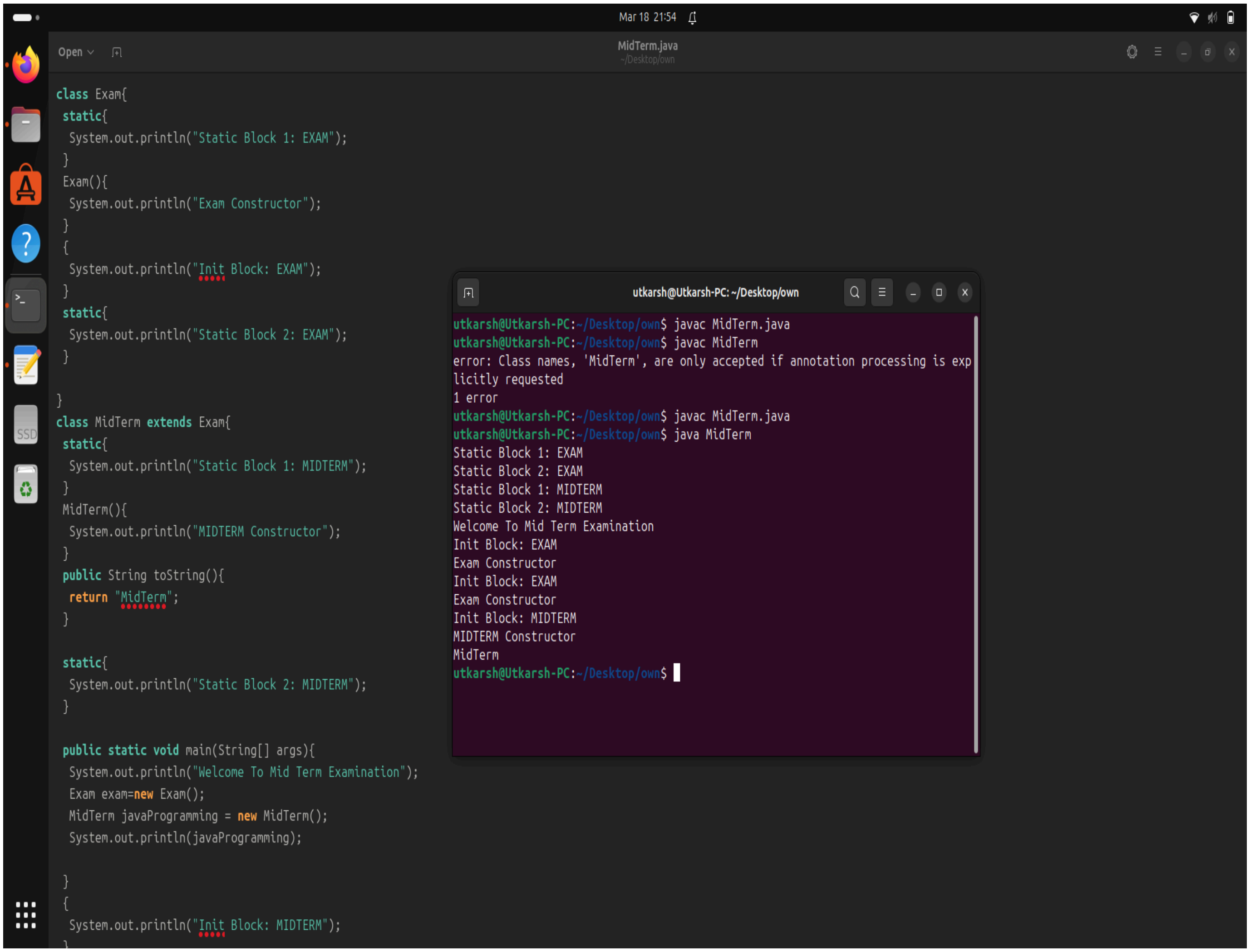
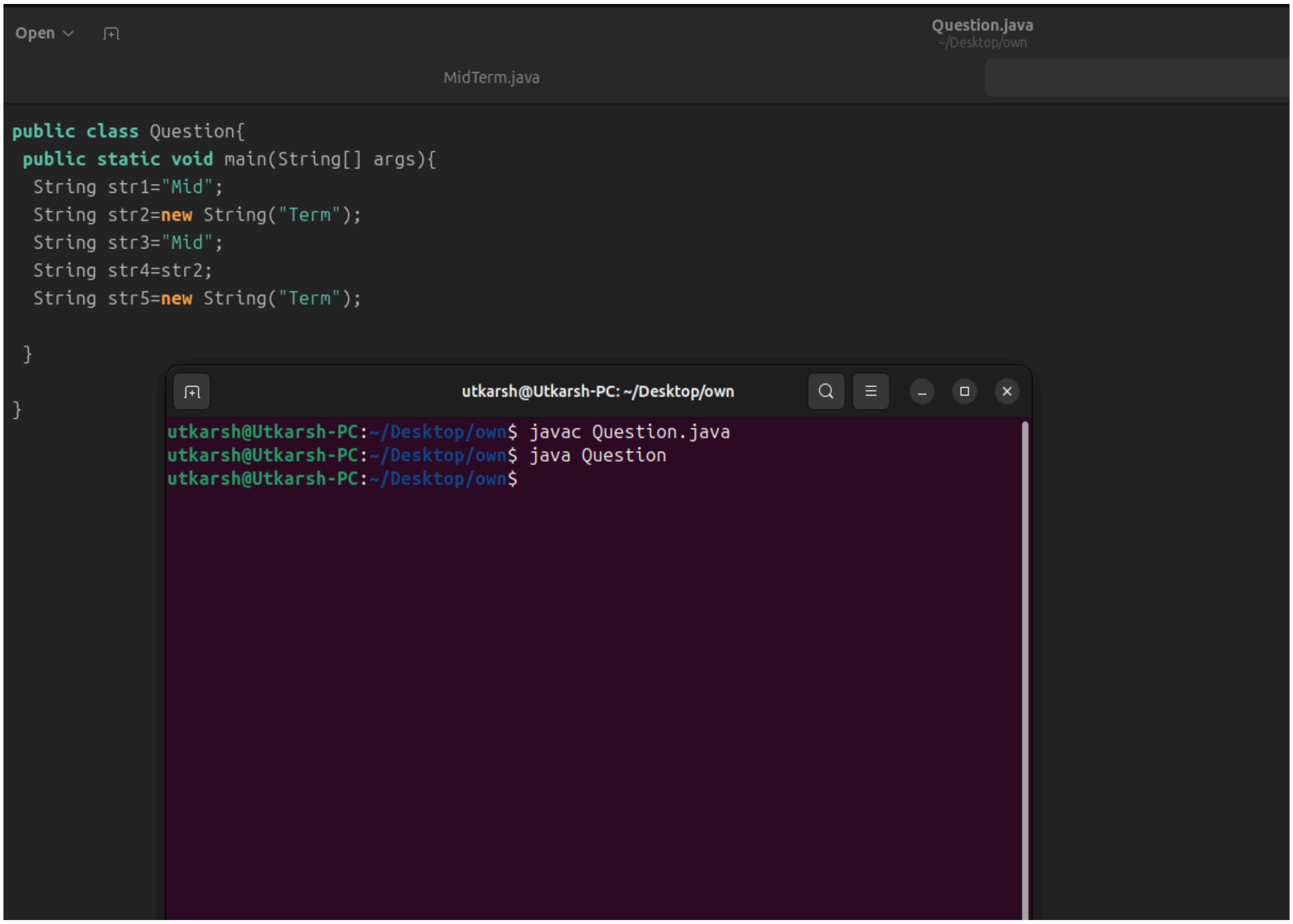

d)Ans:



```
class Exam{
 static{
  System.out.println("Static Block 1: EXAM");
 }
 Exam(){
  System.out.println("Exam Constructor");
 }
 {
  System.out.println("Init Block: EXAM");
 }
 static{
  System.out.println("Static Block 2: EXAM");
 }

}
class MidTerm extends Exam{
 static{
  System.out.println("Static Block 1: MIDTERM");
 }
 MidTerm(){
  System.out.println("MIDTERM Constructor");
 }
 public String toString(){
  return "MidTerm";
 }

 static{
  System.out.println("Static Block 2: MIDTERM");
 }

 public static void main(String[] args){
  System.out.println("Welcome To Mid Term Examination");
  Exam exam=new Exam();
  MidTerm javaProgramming = new MidTerm();
  System.out.println(javaProgramming);

 }
 {
  System.out.println("Init Block: MIDTERM");
 }
```

```
utkarsh@Utkarsh-PC:~/Desktop/own$ javac MidTerm.java
utkarsh@Utkarsh-PC:~/Desktop/own$ javac MidTerm
error: Class names, 'MidTerm', are only accepted if annotation processing is exp
licitly requested
1 error
utkarsh@Utkarsh-PC:~/Desktop/own$ javac MidTerm.java
utkarsh@Utkarsh-PC:~/Desktop/own$ java MidTerm
Static Block 1: EXAM
Static Block 2: EXAM
Static Block 1: MIDTERM
Static Block 2: MIDTERM
Welcome To Mid Term Examination
Init Block: EXAM
Exam Constructor
Init Block: EXAM
Exam Constructor
Init Block: MIDTERM
MIDTERM Constructor
MidTerm
utkarsh@Utkarsh-PC:~/Desktop/own$ 
```

Q5)Ans:



```java
public class Question{
 public static void main(String[] args){
  String str1="Mid";
  String str2=new String("Term");
  String str3="Mid";
  String str4=str2;
  String str5=new String("Term");

 }

}
```

```
utkarsh@Utkarsh-PC:~/Desktop/own$ javac Question.java
utkarsh@Utkarsh-PC:~/Desktop/own$ java Question
utkarsh@Utkarsh-PC:~/Desktop/own$
```