

ANSWERS

ISE 1:

Question 1:

a.

When we try to access a variable which is not declared we get that error.

b.

We can check if "bit" is in the given registration number or not by:

```
public java.lang.String substring(int, int);
```

```
public boolean regionMatches(int, java.lang.String, int, int);
```

Question 2:

a.Static :

it is keyword it showcases that the variable,method belong to class.

it shows class variables.

b.

```
amey-medewar@amey-medewar-1-0:~/Desktop$ java ISE
```

```
null
```

```
-24
```

The default value for the String type is null.

The Integer overflows here when we try to store int to byte it overflows and we get -24 from it.

MIDTERM

```
jshell> Integer y=10  
y ==> 10
```

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

Question 1:

a.

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

b.

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

c.

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

d.

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

e.

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

Question 2:

2.

```
jshell> String k="amey  
| Error:  
| unclosed string literal  
| String k="amey  
|      ^
```

3.

```
jshell> s[1]  
| Error:  
| array required, but java.lang.String found  
| s[1]  
| ^__^
```

Question 3:

We can implement a java code without main method using following command .

```
javac --release 21 --enable-preview filename.java  
the command is available for trial purpose.
```

Question 4:

1.

```
amey-medewar@amey-medewar-1-0:~/Desktop$ javac
mid_paper_Q4a.java
mid_paper_Q4a.java:1: error: class MidTerm is public, should be
declared in a file named MidTerm.java
public class MidTerm{
    ^
mid_paper_Q4a.java:3: error: recursive constructor invocation
    this(5);
    ^
```

2 errors

2.

```
amey-medewar@amey-medewar-1-0:~/Desktop$ java
mid_paper_Q4a.java
Examination Mid
```

3.

```
amey-medewar@amey-medewar-1-0:~/Desktop$ java
mid_paper_Q4a.java
Exception in thread "main" java.lang.StackOverflowError
    at Question4.<init>(mid_paper_Q4a.java:2)
```

4.

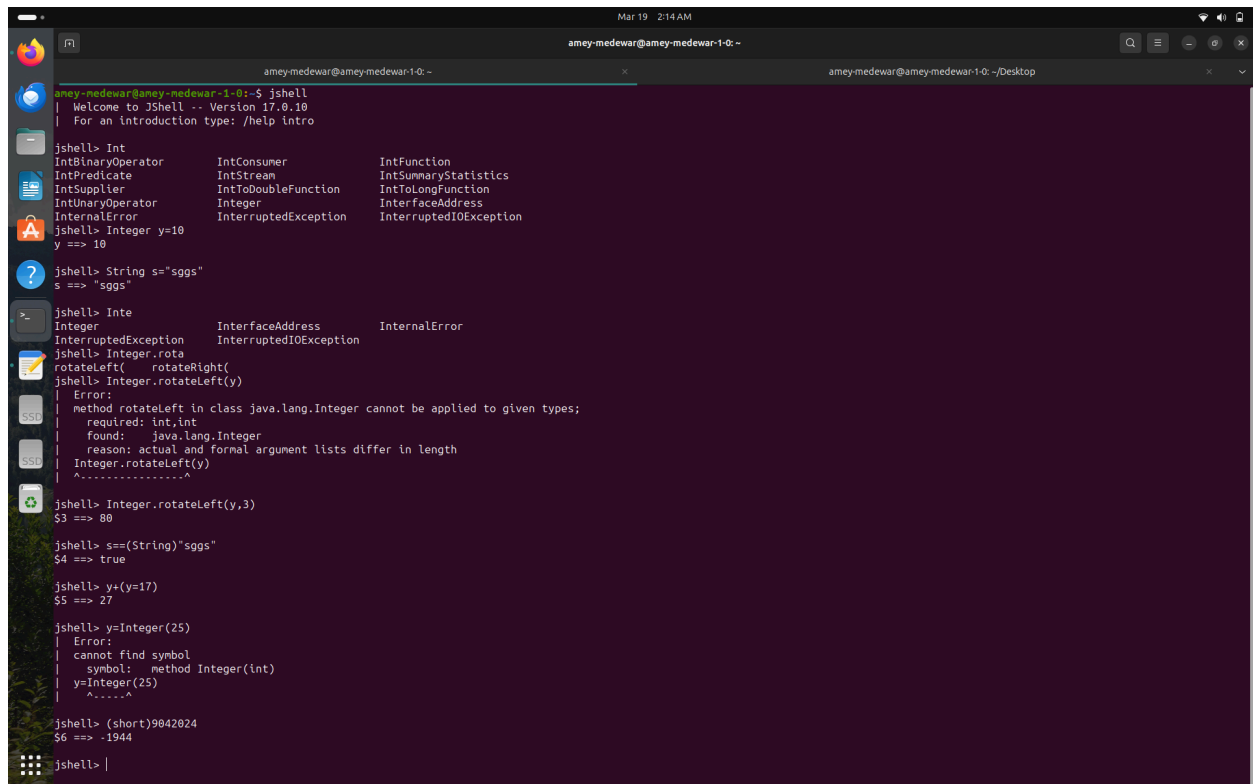
```
amey-medewar@amey-medewar-1-0:~/Desktop$ java MidTerm
static Block 1:EXAM
static Block 2:EXAM
```

static Block 1:Midterm
static Block 2:Midterm
INIT Block :Exam
EXAM Constructor
INIT Block :MidTerm
Midterm Constructor
MidTerm

Question 5:

objects created:

- 1.String str1="mid";
- 2.String str2=new String("Term");
- 3.String str2=new String("Term");



```
amey-medewar@amey-medewar-1-0: ~$ jshell
Welcome to JShell -- Version 17.0.10
For an introduction type: /help intro

jshell> Int
IntBinaryOperator      IntConsumer            IntFunction
IntPredicate           IntStream              IntSummaryStatistics
IntSupplier            IntToDoubleFunction   IntToLongFunction
IntUnaryOperator       Integer               InterfaceAddress
InternalError          InterruptedException  InterruptedException

jshell> Integer y=10
y ==> 10

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

jshell> Inte
Integer                InterfaceAddress        InternalError
InterruptedException    InterruptedException

jshell> Integer.rota
rotateLeft(    rotateRight(
jshell> Integer.rotateLeft(y)
Error:
  method rotateLeft in class java.lang.Integer cannot be applied to given types;
    required: int,int
    found:    java.lang.Integer
    reason: actual and formal argument lists differ in length
    Integer.rotateLeft(y)
    ^^^^^^^^^^^^^^^^^^
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)9842024
$6 ==> -1944

jshell> |
```

```
amey-medewar@amey-medewar-1-0: ~/Desktop
amey-medewar@amey-medewar-1-0:~/Desktop$ touch paper.txt
amey-medewar@amey-medewar-1-0:~/Desktop$ rm paper.txt
amey-medewar@amey-medewar-1-0:~/Desktop$ cd Desktop
amey-medewar@amey-medewar-1-0:~/Desktop$ touch paper.txt
amey-medewar@amey-medewar-1-0:~/Desktop$ open paper.txt
amey-medewar@amey-medewar-1-0:~/Desktop$ touch paper.java
amey-medewar@amey-medewar-1-0:~/Desktop$ open paper.java
amey-medewar@amey-medewar-1-0:~/Desktop$ rm paper.java
amey-medewar@amey-medewar-1-0:~/Desktop$ touch mid_paper_Q4a.java
amey-medewar@amey-medewar-1-0:~/Desktop$ open mid_paper_Q4a.java
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
mid_paper_Q4a.java:6: error: ')' expected
    this(0);
    ^
mid_paper_Q4a.java:13: error: reached end of file while parsing
    }
    ^
2 errors
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
mid_paper_Q4a.java:1: error: class MidTerm is public, should be declared in a file named MidTerm.java
public class MidTerm{
^
mid_paper_Q4a.java:12: error: package Sysytem does not exist
    Sysytem.out.println("Welcome");
    ^
mid_paper_Q4a.java:3: error: recursive constructor invocation
    this(5);
    ^
3 errors
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
mid_paper_Q4a.java:1: error: class MidTerm is public, should be declared in a file named MidTerm.java
public class MidTerm{
^
mid_paper_Q4a.java:3: error: recursive constructor invocation
    this(5);
    ^
2 errors
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
mid_paper_Q4a.java:1: error: class Quetion is public, should be declared in a file named Quetion.java
public class Quetion{
^
1 error
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
mid_paper_Q4a.java:1: error: class Question is public, should be declared in a file named Question.java
public class Question{
^
1 error
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
amey-medewar@amey-medewar-1-0:~/Desktop$ java Quesetion
Error: Could not find or load main class Quesetion
Caused by: java.lang.ClassNotFoundException: Quesetion
```

```
amey-medewar@amey-medewar-1-0: ~/Desktop
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
mid_paper_Q4a.java:19: error: invalid method declaration; return type required
    Exam(){
    ^
mid_paper_Q4a.java:34: error: reached end of file while parsing
    }
    ^
2 errors
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
mid_paper_Q4a.java:19: error: invalid method declaration; return type required
    Exam(){
    ^
1 error
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
amey-medewar@amey-medewar-1-0:~/Desktop$ java mid_paper_Q4a.java
static Block 1:EXAM
static Block 2:EXAM
error: can't find main(String[]) method in class: Exam
amey-medewar@amey-medewar-1-0:~/Desktop$ javac mid_paper_Q4a.java
amey-medewar@amey-medewar-1-0:~/Desktop$ java mid_paper_Q4a.java
static Block 1:EXAM
static Block 2:EXAM
error: can't find main(String[]) method in class: Exam
amey-medewar@amey-medewar-1-0:~/Desktop$ java MidTerm
static Block 1:EXAM
static Block 2:EXAM
static Block 1:MidTerm
static Block 2:MidTerm
INIT Block :Exam
EXAM Constructor
INIT Block :MidTerm
MidTerm Constructor
MidTerm
```

```
Mar 19 2:48 AM
amey-medewar@amey-medewar-1-0: ~
amey-medewar@amey-medewar-1-0: ~/Desktop

y ==> 10
jshell> String s="sggs"
s ==> "sggs"

jshell> Inte
Integer      InterfaceAddress  InternalError
InterruptedException  InterruptedIOException

jshell> Integer.rota
rotateLeft(  rotateRight
jshell> Integer.rotateLeft(y)
| Error:
| method rotateLeft in class java.lang.Integer cannot be applied to given types;
|   required: int,int
|   found:   java.lang.Integer
|   reason: actual and formal argument lists differ in length
| Integer.rotateLeft(y)
| ^^^^^^^^^^^^^^^^^^

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

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

jshell> ys(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> String k="amey
| Error:
| unclosed string literal
| String k="amey
| ^

jshell> s[1]
| Error:
| array required, but java.lang.String found
| s[1]
| ^..^

jshell>
```