

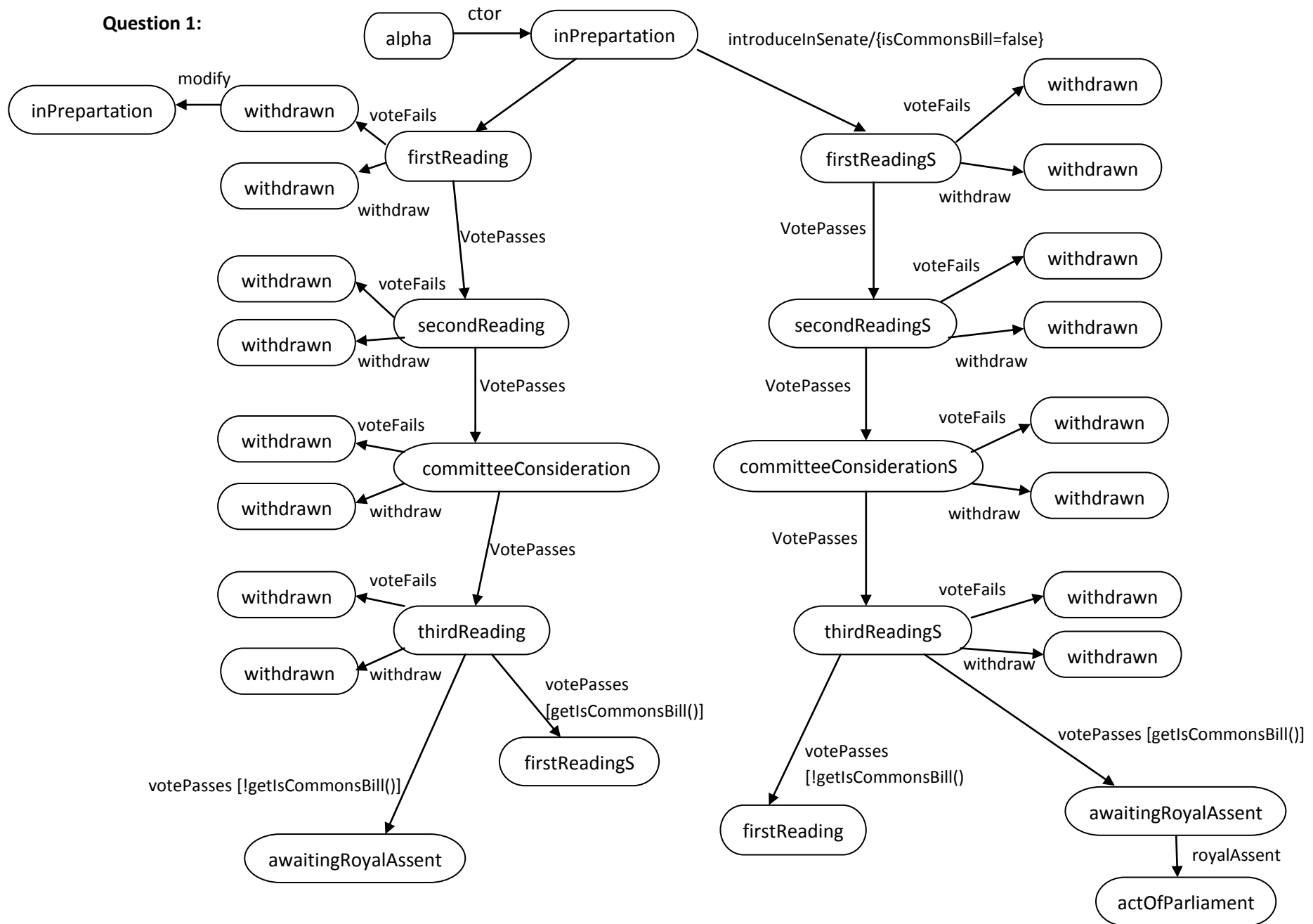
## **ECSE 429 – Software Validation – Assignment 2**

### **Part 0:**

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**Question 1:**



## Question 2:

The sneak paths for the Bill class based on the state machine provided are:

For the state **inPreparation**, the possible inputs that are legal and unspecified for the state are:

- votePasses
- voteFails
- modify
- withdraw
- royalAssent

For the state **firstReading**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **secondReading**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **committeeConsideration**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **thirdReading**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **withdraw**, the possible inputs that are legal and unspecified for the state are:

- votePasses
- voteFails
- withdraw
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **firstReadingS**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **secondReadingS**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **committeeConsiderationS**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **thirdReadingS**, the possible inputs that are legal and unspecified for the state are:

- modify
- introduceInHouse
- introduceInSenate
- royalAssent

For the state **awaitingRoyalAssent**, the possible inputs that are legal and unspecified for the state are:

- votePasses
- voteFails
- modify
- withdraw
- introduceInHouse
- introduceInSenate

For the state **awaitingRoyalAssent**, the possible inputs that are legal and unspecified for the state are:

- votePasses
- voteFails
- modify
- withdraw
- introduceInHouse
- introduceInSenate
- royalAssent

Note: Although voteDenied() is a valid method in the code, it was not defined on the state transition diagram and therefore it is treated as an invalid input to the system. As a result, it is not included as a sneak path and thus not used in the sneak path test cases.

### Question 3:

#### Test Case # 1 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill

ID	Start State	Event	Condition	Reaction	New State
1.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
1.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
1.3	firstReading	voteFails()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn
1.4	withdrawn	modify()	-	billState=inPreparation wasEventProcessed=true	inPreparation

#### Test Case # 2 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill

ID	Start State	Event	Condition	Reaction	New State
2.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
2.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
2.3	firstReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn	withdrawn

				wasEventProcessed=true	
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**Test Case # 3 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
3.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
3.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
3.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
3.4	secondReading	voteFails()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 4 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
4.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
4.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
4.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
4.4	secondReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn	withdrawn

				wasEventProcessed=true	
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**Test Case # 5 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
5.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
5.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
5.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
5.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
5.5	committeeConsideration	voteFails()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 6 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
6.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
6.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
6.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading



6.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
6.5	committeeConsideration	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 7 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
7.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
7.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
7.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
7.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
7.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
7.6	thirdReading	voteFails()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 8 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
8.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null	inPreparation

				billStateInSenate=null	
8.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
8.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
8.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
8.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
8.6	thirdReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 9 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
9.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
9.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
9.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
9.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
9.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
9.6	thirdReading	votePasses()	getIsCommonsBill() = false	billStateInHouseOfCommons=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent

**Test Case # 10 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
10.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
10.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
10.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
10.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
10.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
10.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS

**Test Case # 11 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
11.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
11.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS	firstReadingS

				wasEventProcessed=true	
11.3	firstReadingS	voteFails()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 12 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
12.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
12.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
12.3	firstReadingS	withdraw()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 13 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
13.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
13.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
13.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS	secondReadingS

				wasEventProcessed=true	
13.4	secondReadingS	voteFails()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 14 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
14.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
14.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
14.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
14.4	secondReadingS	withdraw()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 15 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
15.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
15.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS	firstReadingS

				wasEventProcessed=true	
15.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
15.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
15.5	committeeConsiderationS	voteFails()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 16 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
16.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
16.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
16.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
16.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
16.5	committeeConsiderationS	withdraw()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 17 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
17.1	-	constructor	-	isCommonsBill=true	inPreparation

				billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	
17.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
17.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
17.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
17.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS isCommonsBill=true wasEventProcessed=true	thirdReadingS
17.6	thirdReadingS	voteFails()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 18 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
18.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
18.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
18.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
18.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS

18.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS isCommonsBill=true wasEventProcessed=true	thirdReadingS
18.6	thirdReadingS	withdraw()	-	billStateInSenate=null billState=withdrawn wasEventProcessed=true	withdrawn

**Test Case # 19 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
19.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
19.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
19.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
19.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
19.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
19.6	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
19.7	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament



**Test Case # 20 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
20.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
20.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
20.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
20.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
20.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
20.6	thirdReadingS	votePasses()	getIsCommonsBill() =false	billStateInSenate=null billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading

**Test Case # 21 - Conformance Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
21.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
21.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
21.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading	secondReading

				g wasEventProcessed=true	
21.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeCo nsideration wasEventProcessed=true	committeeConsideration
21.5	committeeConsideratio n	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
21.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
21.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
21.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsideration S wasEventProcessed=true	committeeConsiderationS
21.9	committeeConsideratio nS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
21.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
21.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament

**Test Case # 22 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
22.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
22.2	inPreparation	votePasses()	-	Ignored (isCommonBill=true	inPreparation

				billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null)	
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**Test Case # 23 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
23.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
23.2	inPreparation	voteFails()	-	ignored (isCommonBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null)	inPreparation

**Test Case # 24 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
24.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
24.2	inPreparation	modify()	-	ignored (isCommonBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null)	inPreparation

**Test Case # 25 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
25.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
25.2	inPreparation	withdraw()	-	ignored (isCommonBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null wasEventProcessed=false)	inPreparation

**Test Case # 26 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
26.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
26.2	inPreparation	royalAssent()	-	ignored (isCommonBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null wasEventProcessed=false)	inPreparation

**Test Case # 27 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
27.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null	inPreparation

				billStateInSenate=null	
27.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
27.3	firstReading	modify()	-	ignored (billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=false)	firstReading

**Test Case # 28 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
28.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
28.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
28.3	firstReading	introduceInHouse()	-	ignored (billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=false)	firstReading

**Test Case # 29 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
29.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
29.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons	firstReading

				billStateInHouseOfCommons=firstReading wasEventProcessed=true	
29.3	firstReading	introduceInSenate()	-	ignored (billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=false)	firstReading

**Test Case # 30 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
30.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
30.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
30.3	firstReading	royalAssent()	-	ignored (billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=false)	firstReading

**Test Case # 31 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
31.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
31.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading

31.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
31.4	secondReading	modify()	-	Ignored (billStateInHouseOfCommons=secondReading wasEventProcessed=false)	secondReading

**Test Case # 32 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
32.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
32.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
32.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
32.4	secondReading	introduceInHouse()	-	Ignored (billStateInHouseOfCommons=secondReading wasEventProcessed=false)	secondReading

**Test Case # 33 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
33.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
33.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading

33.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
33.4	secondReading	introduceInSenate()	-	Ignored (billStateInHouseOfCommons=secondReading wasEventProcessed=false)	secondReading

**Test Case # 34 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
34.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
34.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
34.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
34.4	secondReading	royalAssent()	-	Ignored (billStateInHouseOfCommons=secondReading wasEventProcessed=false)	secondReading

**Test Case # 35 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
35.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
35.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading



35.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
35.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
35.5	committeeConsideration	modify()	-	Ignored (billStateInHouseOfCommons=committeeConsideration wasEventProcessed=false)	committeeConsideration

**Test Case # 36 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
36.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
36.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
36.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
36.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
36.5	committeeConsideration	introduceInHouse()	-	Ignored (billStateInHouseOfCommons=committeeConsideration wasEventProcessed=false)	committeeConsideration

**Test Case # 37 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
37.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null	inPreparation

				billStateInSenate=null	
37.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
37.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
37.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
37.5	committeeConsideration	introduceInSenate()	-	Ignored (billStateInHouseOfCommons=committeeConsideration wasEventProcessed=false)	committeeConsideration

**Test Case # 38 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
38.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
38.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
38.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
38.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
38.5	committeeConsideration	royalAssent()	-	Ignored (billStateInHouseOfCommons=committeeConsideration wasEventProcessed=false)	committeeConsideration

**Test Case # 39 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
39.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
39.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
39.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
39.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
39.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
39.6	thirdReading	modify()	-	Ignored (billStateInHouseOfCommons=thirdReading wasEventProcessed=false)	thirdReading

**Test Case # 40 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
40.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
40.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
40.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
40.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
40.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading	thirdReading

				wasEventProcessed=true	
40.6	thirdReading	introduceInHouse()	-	Ignored (billStateInHouseOfCommons=thirdReading wasEventProcessed=false)	thirdReading

**Test Case # 41 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
41.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
41.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
41.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
41.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
41.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
41.6	thirdReading	introduceInSenate()	-	Ignored (billStateInHouseOfCommons=thirdReading wasEventProcessed=false)	thirdReading

**Test Case # 42 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
42.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation

42.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
42.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
42.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
42.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
42.6	thirdReading	royalAssent()	-	Ignored (billStateInHouseOfCommons=thirdReading wasEventProcessed=false)	thirdReading

**Test Case # 43 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
43.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
43.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
43.3	firstReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn
43.4	withdrawn	votePasses()	-	Ignored (billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=false)	withdrawn

**Test Case # 44 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
44.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
44.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
44.3	firstReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn
44.4	withdrawn	voteFails()	-	Ignored (billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=false)	withdrawn

**Test Case # 45 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
45.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
45.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
45.3	firstReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn
45.4	withdrawn	withdraw()	-	Ignored (billStateInHouseOfCommons=null	withdrawn

				billState=withdrawn wasEventProcessed=false)	
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**Test Case # 46 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
46.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
46.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
46.3	firstReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn
46.4	withdrawn	introduceInHouse()	-	Ignored (billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=false)	withdrawn

**Test Case # 47 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
47.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
47.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
47.3	firstReading	withdraw()	-	billStateInHouseOfCommons=null	withdrawn

				billState=withdrawn wasEventProcessed=true	
47.4	withdrawn	introduceInSenate()	-	Ignored (billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=false)	withdrawn

**Test Case # 48 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
48.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
48.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
48.3	firstReading	withdraw()	-	billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=true	withdrawn
48.4	withdrawn	royalAssent()	-	Ignored (billStateInHouseOfCommons=null billState=withdrawn wasEventProcessed=false)	withdrawn

**Test Case # 49 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
49.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation



49.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
49.3	firstReadingS	modify()	-	Ignored (isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=false)	firstReadingS

**Test Case # 50 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
50.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
50.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
50.3	firstReadingS	introduceInHouse()	-	Ignored (isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=false)	firstReadingS

**Test Case # 51 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
51.1	-	constructor	-	isCommonsBill=true billState=inPreparation	inPreparation

				billStateInHouseOfCommons=null billStateInSenate=null	
51.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
51.3	firstReadingS	introduceInSenate()	-	Ignored (isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=false)	firstReadingS

**Test Case # 52 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
52.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
52.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
52.3	firstReadingS	royalAssent()	-	Ignored (isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=false)	firstReadingS

**Test Case # 53 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
53.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
53.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
53.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
53.4	secondReadingS	modify()	-	Ignored (billStateInSenate=secondReadingS wasEventProcessed=false)	secondReadingS

**Test Case # 54 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
54.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
54.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
54.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
54.4	secondReadingS	introduceInHouse()	-	Ignored (billStateInSenate=secondReadingS wasEventProcessed=false)	secondReadingS

**Test Case # 55 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
55.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
55.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
55.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
55.4	secondReadingS	introduceInSenate()	-	Ignored (billStateInSenate=secondReadingS wasEventProcessed=false)	secondReadingS

**Test Case # 56 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
56.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
56.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
56.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
56.4	secondReadingS	royalAssent()	-	Ignored (billStateInSenate=secondReadingS wasEventProcessed=false)	secondReadingS

**Test Case # 57 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
57.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
57.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
57.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
57.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
57.5	committeeConsiderationS	modify()	-	Ignored (billStateInSenate=committeeConsiderationS wasEventProcessed=false)	committeeConsiderationS

**Test Case # 58 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
58.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
58.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
58.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
58.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS	committeeConsiderationS

				wasEventProcessed=true	
58.5	committeeConsiderationS	introduceInHouse()	-	Ignored (billStateInSenate=committeeConsiderationS wasEventProcessed=false)	committeeConsiderationS

**Test Case # 59 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
59.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
59.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
59.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
59.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
59.5	committeeConsiderationS	introduceInSenate()	-	Ignored (billStateInSenate=committeeConsiderationS wasEventProcessed=false)	committeeConsiderationS

**Test Case # 60 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
60.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
60.2	inPreparation	introduceInSenate()	-	isCommonsBill=false	firstReadingS

				billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	
60.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
60.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
60.5	committeeConsiderationS	royalAssent()	-	Ignored (billStateInSenate=committeeConsiderationS wasEventProcessed=false)	committeeConsiderationS

**Test Case # 61 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
61.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
61.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
61.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
61.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
61.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
61.6	thirdReadingS	modify()	-	Ignored (billStateInSenate=thirdReadingS wasEventProcessed=false)	thirdReadingS

**Test Case # 62 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
62.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
62.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
62.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
62.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
62.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
62.6	thirdReadingS	introduceInHouse()	-	Ignored (billStateInSenate=thirdReadingS wasEventProcessed=false)	thirdReadingS

**Test Case # 63 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
63.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
63.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
63.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
63.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS	committeeConsiderationS



				wasEventProcessed=true	
63.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
63.6	thirdReadingS	introduceInSenate()	-	Ignored (billStateInSenate=thirdReadingS wasEventProcessed=false)	thirdReadingS

**Test Case # 64 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
64.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
64.2	inPreparation	introduceInSenate()	-	isCommonsBill=false billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
64.3	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
64.4	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
64.5	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
64.6	thirdReadingS	royalAssent()	-	Ignored (billStateInSenate=thirdReadingS wasEventProcessed=false)	thirdReadingS

**Test Case # 65 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
65.1	-	constructor	-	isCommonsBill=true	inPreparation

				billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	
65.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
65.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
65.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
65.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
65.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
65.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
65.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
65.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
65.10	thirdReadingS	votePasses()	getIsCommonsBill() = true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
65.11	awaitingRoyalAssent	modify()	-	Ignored (billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=false)	awaitingRoyalAssent

**Test Case # 66 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
66.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
66.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
66.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
66.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
66.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
66.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
66.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
66.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
66.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
66.10	thirdReadingS	votePasses()	getIsCommonsBill() = true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
66.11	awaitingRoyalAssent	voteFails()	-	Ignored (billStateInSenate=null	awaitingRoyalAssent

				billState=awaitingRoyalAssent wasEventProcessed=false)	
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**Test Case # 67 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
67.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
67.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
67.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
67.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
67.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
67.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
67.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
67.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
67.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
67.10	thirdReadingS	votePasses()	getIsCommonsBill() = true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent

67.11	awaitingRoyalAssent	votePasses()	-	Ignored (billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=false)	awaitingRoyalAssent
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**Test Case # 68 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
68.1	-	Constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
68.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
68.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
68.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
68.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
68.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
68.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
68.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
68.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
68.10	thirdReadingS	votePasses()	getIsCommonsBill()	billStateInSenate=null	awaitingRoyalAssent

			= true	billState=awaitingRoyalAssent wasEventProcessed=true	
68.11	awaitingRoyalAssent	introduceInHouse()	-	Ignored (billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=false)	awaitingRoyalAssent

**Test Case # 69 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
69.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
69.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
69.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
69.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
69.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
69.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
69.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
69.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
69.9	committeeConsideration	votePasses()	-	billStateInSenate=thirdReadingS	thirdReadingS

	nS			wasEventProcessed=true	
69.10	thirdReadingS	votePasses()	getIsCommonsBill() = true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
69.11	awaitingRoyalAssent	introduceToSenate( )	-	Ignored (billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=false)	awaitingRoyalAssent

**Test Case # 70 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
70.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
70.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
70.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
70.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
70.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
70.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
70.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
70.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS	committeeConsideration

				wasEventProcessed=true	onS
70.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
70.10	thirdReadingS	votePasses()	getIsCommonsBill() = true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
70.11	awaitingRoyalAssent	withdraw()	-	Ignored (billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=false)	awaitingRoyalAssent

**Test Case # 71 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
71.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
71.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
71.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
71.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
71.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
71.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
71.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS	secondReadingS



				wasEventProcessed=true	
71.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
71.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
71.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
71.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament
71.12	actOfParliament	modify()	-	Ignored (billState=actOfParliament wasEventProcessed=false)	actOfParliament

**Test Case # 72 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
72.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
72.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
72.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
72.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
72.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
72.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate	firstReadingS

				billStateInSenate=firstReadingS wasEventProcessed=true	
72.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
72.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
72.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
72.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
72.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament
72.12	actOfParliament	votePasses()	-	Ignored (billState=actOfParliament wasEventProcessed=false)	actOfParliament

**Test Case # 73 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
73.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
73.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
73.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
73.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
73.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading	thirdReading

	ion			wasEventProcessed=true	
73.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
73.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
73.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
73.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
73.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
73.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament
73.12	actOfParliament	voteFails()	-	Ignored (billState=actOfParliament wasEventProcessed=false)	actOfParliament

**Test Case # 74 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
74.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
74.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
74.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
74.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsid	committeeConsiderati

				eration wasEventProcessed=true	on
74.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
74.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
74.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
74.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
74.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
74.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
74.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament
74.12	actOfParliament	introduceInHouse()	-	Ignored (billState=actOfParliament wasEventProcessed=false)	actOfParliament

**Test Case # 75 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
75.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation
75.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading

75.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
75.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
75.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
75.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
75.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
75.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
75.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
75.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
75.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament
75.12	actOfParliament	introduceToSenate()	-	Ignored (billState=actOfParliament wasEventProcessed=false)	actOfParliament

**Test Case # 76 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
76.1	-	constructor	-	isCommonsBill=true billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	inPreparation

76.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
76.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
76.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
76.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
76.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
76.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
76.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
76.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
76.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
76.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament
76.12	actOfParliament	withdraw()	-	Ignored (billState=actOfParliament wasEventProcessed=false)	actOfParliament

**Test Case # 77 - Sneak Path Test - Objects Needed: billState, billStateInHouse, billStateInSenate, isCommonsBill**

ID	Start State	Event	Condition	Reaction	New State
77.1	-	constructor	-	isCommonsBill=true	inPreparation

				billState=inPreparation billStateInHouseOfCommons=null billStateInSenate=null	
77.2	inPreparation	introduceInHouse()	-	billState=inHouseOfCommons billStateInHouseOfCommons=firstReading wasEventProcessed=true	firstReading
77.3	firstReading	votePasses()	-	billStateInHouseOfCommons=secondReading wasEventProcessed=true	secondReading
77.4	secondReading	votePasses()	-	billStateInHouseOfCommons=committeeConsideration wasEventProcessed=true	committeeConsideration
77.5	committeeConsideration	votePasses()	-	billStateInHouseOfCommons=thirdReading wasEventProcessed=true	thirdReading
77.6	thirdReading	votePasses()	getIsCommonsBill = true	billStateInHouseOfCommons=null billState=inSenate billStateInSenate=firstReadingS wasEventProcessed=true	firstReadingS
77.7	firstReadingS	votePasses()	-	billStateInSenate=secondReadingS wasEventProcessed=true	secondReadingS
77.8	secondReadingS	votePasses()	-	billStateInSenate=committeeConsiderationS wasEventProcessed=true	committeeConsiderationS
77.9	committeeConsiderationS	votePasses()	-	billStateInSenate=thirdReadingS wasEventProcessed=true	thirdReadingS
77.10	thirdReadingS	votePasses()	getIsCommonsBill() =true	billStateInSenate=null billState=awaitingRoyalAssent wasEventProcessed=true	awaitingRoyalAssent
77.11	awaitingRoyalAssent	royalAssent()	-	billState=actOfParliament wasEventProcessed=true	actOfParliament
77.12	actOfParliament	royalAssent()	-	Ignored (billState=actOfParliament wasEventProcessed=false)	actOfParliament

#### Question 4:

See source code

#### Question 5:

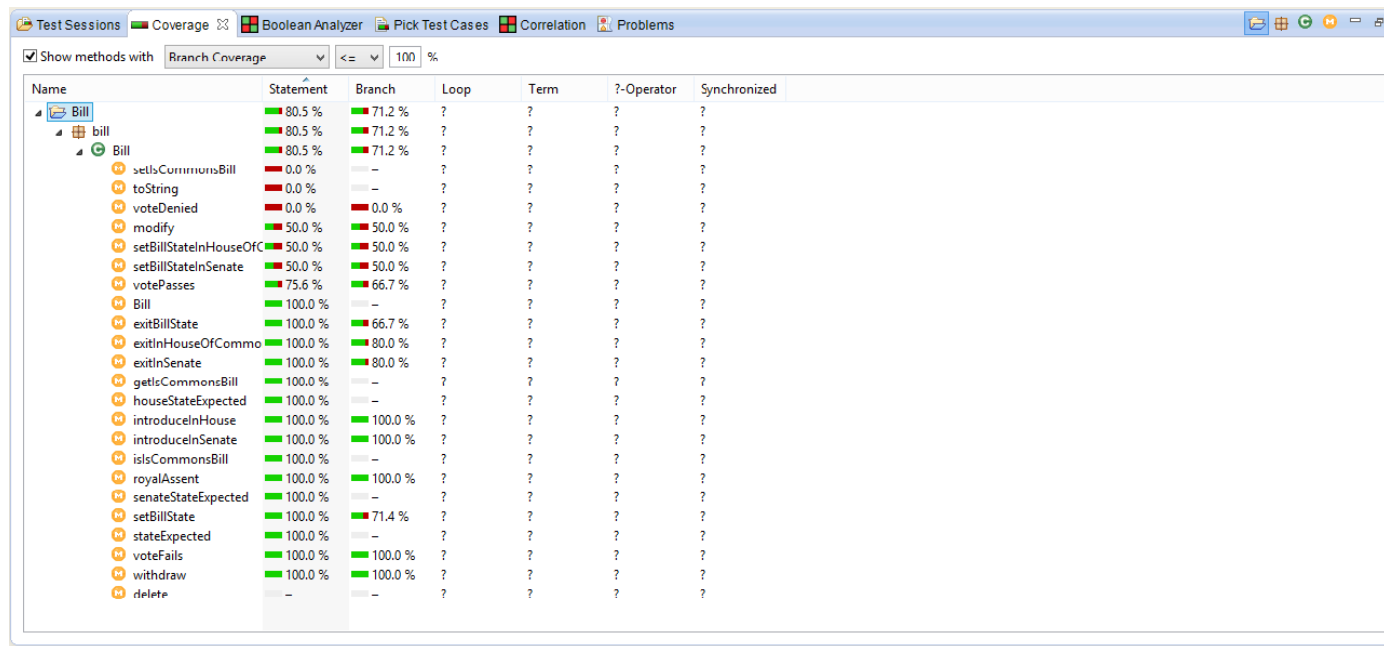
- |  |            |
|--|------------|
| 1. Failed – because voteFails leads to a different state (secondReading) than expected | 21. Passed |
| 2. Passed  | 22. Passed |
| 3. Failed – because voteFails leads to a different state (secondReading) than expected | 23. Passed |
| 4. Passed  | 24. Passed |
| 5. Failed – because voteFails leads to a different state (secondReading) than expected | 25. Passed |
| 6. Passed  | 26. Passed |
| 7. Failed – because voteFails leads to a different state (secondReading) than expected | 27. Passed |
| 8. Passed  | 28. Passed |
| 9. Failed – because voteFails leads to a different state (secondReading) than expected | 29. Passed |
| 10. Passed   | 30. Passed |
| 11. Passed   | 31. Passed |
| 12. Passed   | 32. Passed |
| 13. Passed   | 33. Passed |
| 14. Passed   | 34. Passed |
| 15. Passed   | 35. Passed |
| 16. Passed   | 36. Passed |
| 17. Passed   | 37. Passed |
| 18. Passed   | 38. Passed |
| 19. Passed   | 39. Passed |
| 20. Passed   | 40. Passed |
|  | 41. Passed |
|  | 42. Passed |
|  | 43. Passed |
|  | 44. Passed |
|  | 45. Passed |



46. Passed  
47. Passed  
48. Passed  
49. Passed  
50. Passed  
51. Passed  
52. Passed  
53. Passed  
54. Passed  
55. Passed  
56. Passed  
57. Passed  
58. Passed  
59. Passed  
60. Passed  
76. Passed

61. Passed  
62. Passed  
63. Passed  
64. Passed  
65. Passed  
66. Passed  
67. Passed  
68. Passed  
69. Passed  
70. Passed  
71. Passed  
72. Passed  
73. Passed  
74. Passed  
75. Passed

Branch coverage:



This is expected as the test cases only cover the public methods that are visible from outside the class. The state machine also does not specify all the branches that may be available in the control flow. Some transitions are specified and implemented but not used by the state machine.

#### Question 6:

100% branch coverage is not possible because some branches are not accessible from outside the class. For example, `exitInHouseOfCommons()` and `exitInSenate()` cannot execute their default cases because the methods are not visible outside for sneak path test.

ID	Input	Expected output	Coverage goal
78	billState = withdrawn	billState = inPreparation wasEventProcessed = true	case withdrawn in modify()
79	billState = inHouseOfCommons billStateInHouseOfCommons =	billStateInHouseOfCommons = lastReading wasEventProcessed = true	case inHouseOfCommons in

	firstReading billStateInSenate = Null		voteDenied()
80	billState = inSenate billStateInSenate = firstReadingS billStateInHouseOfCommons = Null	billStateInSenate = firstReadingS wasEventProcessed = true	case inSenate in voteDenied()
81	billState = inPreparation billStateInHouseOfCommons = Null billStateInSenate = Null	billState = inPreparation billStateInHouseOfCommons = Null billStateInSenate = Null wasEventProcessed = false	Case default in voteDenied()
82	billState = inHouseOfCommons billStateInHouseOfCommons = thirdReading isCommonsBill = false	billState = awaitingRoyalAssent billStateInHouseOfCommons = Null wasEventProcessed = true	case thirdReading with isCommonsBill = false in votePasses()
83	billState = inSenate billStateInSenate = thirdReadingS isCommonsBill = false	billState = inHouseOfCommons billStateInSenate = Null billStateInHouseOfCommons = firstReading wasEventProcessed = true	case thirdReadingS with isCommonsBill = false in votePasses()
84	billState = inPreparation isCommonsBill = true	getClass().getName()@Integer.toHexString(hashCode())[isCommonsBill:true]	toString()

Test Sessions Coverage Boolean Analyzer Pick Test Cases Correlation Problems							
Show methods with		Branch Coverage	<=	90.5	%		
Name	Statement	Branch	Loop	Term	?-Operator	Synchronized	
Bill	97.4 %	84.7 %	?	?	?	?	
Bill	100.0 %	—	?	?	?	?	
BillState	—	—	?	?	?	?	
BillStateInHouseOfCon	—	—	?	?	?	?	
BillStateInSenate	—	—	?	?	?	?	
delete	—	—	?	?	?	?	
exitBillState	100.0 %	66.7 %	?	?	?	?	
exitInHouseOfCommo	100.0 %	80.0 %	?	?	?	?	
exitInSenate	100.0 %	80.0 %	?	?	?	?	
getIsCommonsBill	100.0 %	—	?	?	?	?	
houseStateExpected	100.0 %	—	?	?	?	?	
introduceInHouse	100.0 %	100.0 %	?	?	?	?	
introduceInSenate	100.0 %	100.0 %	?	?	?	?	
isIsCommonsBill	100.0 %	—	?	?	?	?	
modify	100.0 %	100.0 %	?	?	?	?	
royalAssent	100.0 %	100.0 %	?	?	?	?	
senateStateExpected	100.0 %	—	?	?	?	?	
setBillState	100.0 %	71.4 %	?	?	?	?	
setBillStateInHouseOfC	50.0 %	50.0 %	?	?	?	?	
setBillStateInSenate	50.0 %	50.0 %	?	?	?	?	
setIsCommonsBill	100.0 %	—	?	?	?	?	
stateExpected	100.0 %	—	?	?	?	?	
toString	100.0 %	—	?	?	?	?	
voteDenied	100.0 %	100.0 %	?	?	?	?	
voteFails	100.0 %	100.0 %	?	?	?	?	
votePasses	95.1 %	88.9 %	?	?	?	?	
withdraw	100.0 %	100.0 %	?	?	?	?	

## Question 7:

See source code

Test case 9 and 19 are expected to fail because they travel the paths on the round-trip path tree that only goes from inHouseOfCommons (test case 9) or inSenate (test case 19) to awaitingRoyalAssent. These paths are impossible.

**Question 8:**

Requirement validation would have revealed a trap door as trap door is a hidden functionality of the code that is not included in the specification. By referring back to the requirement, one can determine whether an input should be defined by the system. Each input identified in the requirement shall be recognized by the system. Once all the defined inputs are verified, variations of them can be used to test if the system responds to similar but undefined inputs. If it is not specified in the requirement but is accepted by the system, the implementation has a trap door for that input.