

$TS = \text{totalQuilts}$	$gS = \text{groupSize}$	$aG = \text{availableGroup}$	
<u>Test Cases</u>	TC1	TC2	TC3   TC4
<u><math>TS \geq 0</math></u>		x	x   x
<u><math>TS &lt; 0</math></u>	x	x	
<u><math>gS &gt; 0</math></u>		x	all max   x max
<u><math>gS \leq 0</math></u>	x	x	
<u><math>aG \geq 0</math></u>		x   x	x max   max
<u><math>aG \leq 0</math></u>			
<u>Erwarteter Ausgab</u>	exception	○ exception $(gS - aG)$	$TS - (gS, aG)$ ○
<u>Result</u>	exception	○ exception overflow question	○



- 1: Create List
- 2: enter loop
- 3: student id test
- 4: if  $B = \text{true}$  Sysout und zurück zu 2
- 5: if  $B = \text{false}$  assignment Nach
- 6: if  $S = \text{true}$  Sysout und zurück zu 2
- 7: if  $S = \text{false}$  capacity check
- 8: if  $T > \text{true}$  Sysout und zurück zu 2
- 9: if  $T = \text{false}$  student.add(i) und zurück zu 2
- 10: exit loop and return

Statement Coverage:

$$\begin{aligned} \text{testInvailidStudentId} &= \frac{4}{10} \\ \text{testSuccessfullSegment} &= \frac{7}{10} \end{aligned} \quad \left. \begin{array}{l} \frac{4}{10} \\ \frac{7}{10} \end{array} \right\} \frac{8}{10} = 80\%$$

Branch Coverage:

$$\frac{4}{6} \times 100 = 66,67\% \quad \underline{\underline{}}$$

Condition Coverage:

$$\frac{4}{6} \times 100 = 66,67\% \quad \underline{\underline{}}$$

Path Coverage: Pfad: (1) 1 → 2 → 3 (true) → 4 → 2 → 10

(2) 1 → 2 → 3 (false) → 5 (false) → 7 (false) → 9 → 2 → 10

(3) 1 → 2 → 3 (false) → 5 (true) → 6 → 2 → 10

(4) 1 → 2 → 3 (false) → 5 (false) → 7 (true) → 8 → 2 → 10

Pfad 1 und 2 abgedeckt

$$100 \cdot \frac{2}{4} = 50\% \quad \underline{\underline{}}$$