Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
1	Testing case of username containing alphabetic and spaces not starting with space	1		student name =Hassan khaled	1- Open the GPA Calculator program 2- Enter student name 3- Press calculate	correct student name info	calculate GPA	correct subject name info	
2	Testing case of subject name containing numbers only.	1		student name =1234	1. Open the GPA Calculator program 2. Enter student name 3. Press calculate	invalid name containing numbers	Not calculate	invalid name containing numbers	
3	Testing case of subject name containing numbers with Alphabetic.	1		subject name =hk1234	1- Open the GPA Calculator program 2- Enter student name 3- Press calculate	invalid name containing numbers	Not calculate	invalid name containing numbers	
4	Testing case of username containing alphabetic only.	1		student name =Hassan	1- Open the GPA Calculator program 2- Enter student name 3- Press calculate	invalid name containing Alphabetic only	Not calculate	invalid name containing Alphabetic only	
5	Testing case of username containing Spaces only.	1		student name =__	1- Open the GPA Calculator program 2- Enter student name 3- Press calculate	invalid name containing Spaces only	Not calculate	invalid name containing Spaces only	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
6	Testing case of username containing alphabetic and spaces starting with space	1		student name = Hassan khaled	1- Open the GPA Calculator program 2- Enter student name 3- Press calculate	invalid name Start with Space	Not calculate	invalid name Start with Space	
7	Testing case of username containing alphabetic and spaces starting with space & containing numbers	1		student name = Hassan 123	1. Open the GPA Calculator program 2. Enter student name 3. Press calculate	invalid name Start with Space or invalid name containing numbers	Not calculate	invalid name Start with Space or invalid name containing numbers	
8	Testing case of emoty username	1		student name =	1. Open the GPA Calculator program 2. Enter no thing 3. Press calculate	invalid name	Not calculate	invalid name	
9	Testing case of student number containing 8 numbers	2		student number = 19008680	1. Open the GPA Calculator program 2. Enter student number 3. Press calculate	correct student number info	Calculate GPA	correct student number info	
10	Testing case of student number containing 7 numbers + 1 char	2		student number = 1900868H	1. Open the GPA Calculator program 2. Enter student number 3. Press calculate	correct student number info	Calculate GPA	correct student number info	
11	Testing case of student number containing chars at any first 7 places	2		student number = 190086DH	1. Open the GPA Calculator program 2. Enter student number 3. Press calculate	invalid number (containing chars at any first 7 places)	Not calculate	invalid number (containing chars at any first 7 places)	
12	Testing case of student number containing special symbol at any place	2		student number = 19008#80	1. Open the GPA Calculator program 2. Enter student number 3. Press calculate	invalid number (containing special symbo)	Not calculate	invalid number (containing special symbo)	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
13	Testing case of student number containing special spaces at any place	2		student number = 19008 80	1. Open the GPA Calculator program 2. Enter student number 3. Press calculate	invalid number (containing special space)	Not calculate	invalid number (containing special space)	
14	Testing case of student number with width not equal 8	2		student number = 19008#8	1. Open the GPA Calculator program 2. Enter student number 3. Press calculate	invalid number (wrong width)	Not calculate	invalid number (wrong width)	
15	Testing case of activity mark containing any value between 0 & 10	3		Activity mark = 7	1. Open the GPA Calculator program 2. Enter activity mark 3. Press calculate	Correct activity mark	Calculate GPA	Correct activity mark	
16	Testing case of activity mark containing the corner case 0	3		Activity mark = 0	1. Open the GPA Calculator program 2. Enter activity mark 3. Press calculate	Correct activity mark	Calculate GPA	Correct activity mark	
17	Testing case of activity mark containing the corner case 10	3		Activity mark = 10	1. Open the GPA Calculator program 2. Enter activity mark 3. Press calculate	Correct activity mark	Calculate GPA	Correct activity mark	
18	Testing case of activity mark containing out of range value	3		Activity mark = 199	1. Open the GPA Calculator program 2. Enter activity mark 3. Press calculate	invalid activity mark (out of range)	Not calculate	invalid activity mark (out of range)	
19	Testing case of activity mark containing the invalid corner case -1	3		Activity mark = -1	1. Open the GPA Calculator program 2. Enter activity mark 3. Press calculate	invalid activity mark (out of range)	Not calculate	invalid activity mark (out of range)	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
20	Testing case of activity mark containing the invalid corner case 11	3		activity mark = 11	1. Open the GPA Calculator program 2. Enter activity mark 3. Press calculate	invalid activity mark (out of range)	Not calculate	invalid activity mark (out of range)	
21	Testing case of midterm mark containing any value between 0 & 20	4		midterm mark = 17	1. Open the GPA Calculator program 2. Enter midterm mark 3. Press calculate	Correct midterm mark	Calculate GPA	Correct midterm mark	
22	Testing case of midterm mark containing the corner case 0	4		midterm mark = 0	1. Open the GPA Calculator program 2. Enter midterm mark 3. Press calculate	Correct midterm mark	Calculate GPA	Correct midterm mark	
23	Testing case of midterm mark containing the corner case 20	4		midterm mark = 10	1. Open the GPA Calculator program 2. Enter midterm mark 3. Press calculate	Correct midterm mark	Calculate GPA	Correct midterm mark	
24	Testing case of midterm mark containing out of range value	4		midterm mark = 199	1. Open the GPA Calculator program 2. Enter midterm mark 3. Press calculate	invalid midterm mark (out of range)	Not calculate	invalid midterm mark (out of range)	
25	Testing case of midterm mark containing the invalid corner case -1	4		midterm mark = -1	1. Open the GPA Calculator program 2. Enter midterm mark 3. Press calculate	invalid midterm mark (out of range)	Not calculate	invalid midterm mark (out of range)	
26	Testing case of midterm mark containing the invalid corner case 21	4		midterm mark = 21	1. Open the GPA Calculator program 2. Enter midterm mark 3. Press calculate	invalid midterm mark (out of range)	Not calculate	invalid midterm mark (out of range)	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
27	Testing case of practical mark containing any value between 0 & 10	5		practical mark = 7	1. Open the GPA Calculator program 2. Enter practical mark 3. Press calculate	Correct practical mark	Calculate GPA	Correct practical mark	
28	Testing case of practical mark containing the corner case 0	5		practical mark = 0	1. Open the GPA Calculator program 2. Enter practical mark 3. Press calculate	Correct practical mark	Calculate GPA	Correct practical mark	
29	Testing case of practical mark containing the corner case 10	5		practical mark = 10	1. Open the GPA Calculator program 2. Enter practical mark 3. Press calculate	Correct practical mark	Calculate GPA	Correct practical mark	
30	Testing case of practical mark containing out of range value	5		practical mark = 199	1. Open the GPA Calculator program 2. Enter practical mark 3. Press calculate	invalid practical mark (out of range)	Not calculate	invalid practical mark (out of range)	
31	Testing case of practical mark containing the invalid corner case -1	5		practical mark = -1	1. Open the GPA Calculator program 2. Enter practical mark 3. Press calculate	invalid practical mark (out of range)	Not calculate	invalid practical mark (out of range)	
32	Testing case of practical mark containing the invalid corner case 11	5		practical mark = 11	1. Open the GPA Calculator program 2. Enter practical mark 3. Press calculate	invalid practical mark (out of range)	Not calculate	invalid practical mark (out of range)	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
33	Testing case of final mark containing any value between 0 & 10	6		final mark = 28	1. Open the GPA Calculator program 2. Enter final mark 3. Press calculate	Correct final mark	Calculate GPA	Correct final mark	
34	Testing case of final mark containing the corner case 0	6		final mark = 0	1. Open the GPA Calculator program 2. Enter final mark 3. Press calculate	Correct final mark	Calculate GPA	Correct final mark	
35	Testing case of final mark containing the corner case 60	6		final mark = 60	1. Open the GPA Calculator program 2. Enter final mark 3. Press calculate	Correct final mark	Calculate GPA	Correct final mark	
36	Testing case of final mark containing out of range value	6		final mark = 199	1. Open the GPA Calculator program 2. Enter final mark 3. Press calculate	invalid final mark (out of range)	Not calculate	invalid final mark (out of range)	
37	Testing case of final mark containing the invalid corner case -1	6		final mark = -1	1. Open the GPA Calculator program 2. Enter final mark 3. Press calculate	invalid final mark (out of range)	Not calculate	invalid final mark (out of range)	
38	Testing case of final mark containing the invalid corner case 61	6		final mark = 61	1. Open the GPA Calculator program 2. Enter final mark 3. Press calculate	invalid final mark (out of range)	Not calculate	invalid final mark (out of range)	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
39	Testing case of full mark containing any value between 0 & 100	7		full mark = 78	4. Open the GPA Calculator program 5. Enter full mark 6. Press calculate	Correct full mark	Calculate GPA	Correct full mark	
40	Testing case of full mark containing the corner case 0	7		full mark = 0	4. Open the GPA Calculator program 5. Enter full mark 6. Press calculate	Correct full mark	Calculate GPA	Correct full mark	
41	Testing case of full mark containing the corner case 100	7		full mark = 100	4. Open the GPA Calculator program 5. Enter full mark 6. Press calculate	Correct full mark	Calculate GPA	Correct full mark	
42	Testing case of full mark containing out of range value	7		full mark = 199	4. Open the GPA Calculator program 5. Enter full mark 6. Press calculate	invalid full mark (out of range)	Not calculate	invalid full mark (out of range)	
43	Testing case of full mark containing the invalid corner case -1	7		full mark = -1	4. Open the GPA Calculator program 5. Enter full mark 6. Press calculate	invalid full mark (out of range)	Not calculate	invalid full mark (out of range)	
44	Testing case of full mark containing the invalid corner case 101	7		full mark = 101	4. Open the GPA Calculator program 5. Enter full mark 6. Press calculate	invalid full mark (out of range)	Not calculate	invalid full mark (out of range)	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
45	Testing case of subject name containing alphabetic and spaces not starting with space	8		subject name = sw testing	1. Open the GPA Calculator program 2. Enter subject name 3. Press calculate	correct subject name info	calculate GPA	correct subject name info	
46	Testing case of subject name containing numbers only.	8		subject name =1234	1. Open the GPA Calculator program 2. Enter subject name 3. Press calculate	invalid name containing numbers	Not calculate	invalid name containing numbers	
47	Testing case of subject name containing numbers with Alphabetic.	8		subject name =sw1234	1. Open the GPA Calculator program 2. Enter subject name 3. Press calculate	invalid name containing numbers	Not calculate	invalid name containing numbers	
48	Testing case of subject name containing alphabetic only.	8		subject name =testing	1. Open the GPA Calculator program 2. Enter subject name 3. Press calculate	invalid name containing Alphabetic only	Not calculate	invalid name containing Alphabetic only	
49	Testing case of subject name containing Spaces only.	8		subject name =	1. Open the GPA Calculator program 2. Enter subject name 3. Press calculate	invalid name containing Spaces only	Not calculate	invalid name containing Spaces only	
50	Testing case of subject name containing alphabetic and spaces starting with space	8		subject name = sw testing	1. Open the GPA Calculator program 2. Enter subject name 3. Press calculate	invalid name Start with Space	Not calculate	invalid name Start with Space	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
51	Testing case of subject name containing alphabetic and spaces starting with space & containing numbers	8		subject name = sw 123	1. Open the GPA Calculator program 2. Enter subject name 3. Press calculate	invalid name Start with Space or invalid name containing numbers	Not calculate	invalid name Start with Space or invalid name containing numbers	
52	Testing case of emoty subject name	8		subject name =	1. Open the GPA Calculator program 2. Enter no thing 3. Press calculate	invalid name	Not calculate	invalid name	
53	Testing case of subject code containing 3 alphabetic+3 numbers + s	9		subject code = ASU123s	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code info	calculate GPA	correct subject code info	
54	Testing case of subject code containing 3 alphabetic+3 numbers	9		subject code = ASU123	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code info	calculate GPA	correct subject code info	
55	Testing case of subject code containing 6 alphabetic characters	9		subject code = ASUCSE	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must exist 3 alphabetic only)	Not calculate	invalid sub code	
56	Testing case of subject code containing 6 alphabetic characters	9		subject code = ASUCSE	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must exist 3 alphabetic only)	Not calculate	invalid sub code	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
57	Testing case of subject code containing 7 alphabetic characters	9		subject code = ASUCSEs	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must exist 3 alphabetic only)	Not calculate	invalid sub code	
58	Testing case of subject code containing 6 numeric characters	9		subject code = 123456	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must exist 3 alphabetic)	Not calculate	invalid sub code	
59	Testing case of subject code containing 7 numeric characters	9		subject code = 1234567	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must exist 3 alphabetic)	Not calculate	invalid sub code	
60	Testing case of subject code containing alphabetic characters in any position after 3	9		subject code = ASU4C3s	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must not exist any alphabetic after position 3)	Not calculate	invalid sub code	
61	Testing case of subject code containing 6 numeric characters in any position before 4	9		subject code = A5U123s	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must not exist any numeric before position 4)	Not calculate	invalid sub code	
62	Testing case of subject code containing special character in any position	9		subject code = ASU123%	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must not exist any special character)	Not calculate	invalid sub code	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
63	Testing case of subject code containing special character in any position	9		subject code = ASU123%	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must not exist any special character)	Not calculate	invalid sub code	
64	Testing case of subject code containing s in the sixth position	9		subject code = ASU12s	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (sixth position must be numeric character)	Not calculate	invalid sub code	
65	Testing case of subject code containing any char in 7th position (which not s)	9		subject code = ASU123&	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (7th position must be s if exist)	Not calculate	invalid sub code	
66	Testing case of subject code containing any spaces in any position)	9		subject code = ASU1 23&	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (must not contain any spaces)	Not calculate	invalid sub code	
67	Testing case of subject code containing less than 6 characters	9		subject code = ASU12	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (length is invalid)	Not calculate	invalid sub code	
68	Testing case of subject code containing nothing	9		subject code =	1. Open the GPA Calculator program 2. Enter subject code 3. Press calculate	correct subject code (length is zero)	Not calculate	invalid sub code	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
69	Testing compute total mark function	10		Activities mark = 8 ,Practical mark = 0 midterm mark = 20 final mark = 59	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	87	calculate	87	
70	Testing grade to be A+ when the total mark between 97&100	11		Total mark = 100 Total mark = 97	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	A+ A+	calculate	A+ A+	
71	Testing grade to be A when the total mark between 93&96	11		Total mark = 96 Total mark = 93	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	A A	calculate	A A	
72	Testing grade to be A+ when the total mark between 89& 92	11		Total mark = 92 Total mark = 89	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	A- A-	calculate	A- A-	
73	Testing grade to be B+ when the total mark between 84&88	11		Total mark = 88 Total mark = 84	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	B+ B+	calculate	B+ B+	
74	Testing grade to be B when the total mark between 80&83	11		Total mark = 83 Total mark = 80	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	B B	calculate	B B	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
75	Testing grade to be B- when the total mark between 76&79	11		Total mark = 79 Total mark = 76	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	B- B-	calculate	B- B-	
76	Testing grade to be C+ when the total mark between 73&76	11		Total mark = 76 Total mark = 73	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	C+ C+	calculate	C+ C+	
77	Testing grade to be C when the total mark between 70&72	11		Total mark = 72 Total mark = 70	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	C C	calculate	C C	
78	Testing grade to be C- when the total mark between 67&69	11		Total mark = 69 Total mark = 67	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	C- C-	calculate	C- C-	
79	Testing grade to be D+ when the total mark between 64&66	11		Total mark = 66 Total mark = 64	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	D+ D+	calculate	D+ D+	
80	Testing grade to be D when the total mark between 60&63	11		Total mark = 63 Total mark = 60	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	D D	calculate	D D	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
81	Testing grade to be F when the total mark between 0&59	11		Total mark = 59 Total mark = 0	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	F F	calculate	F F	
82	Testing gpa to be 4 when the grade is A+	12		A+	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	4	calculate	4	
83	Testing gpa to be 4 when the grade is A	12		A	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	4	calculate	4	
84	Testing gpa to be 3.7 when the grade is A-	12		A-	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	3.7	calculate	3.7	
85	Testing gpa to be 3.3 when the grade is B+	12		B+	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	3.3	calculate	3.3	
86	Testing gpa to be 3 when the grade is B	12		B	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	3	calculate	3	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
87	Testing gpa to be 2.7 when the grade is B-	12		B-	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	2.7	calculate	2.7	
88	Testing gpa to be 2.3 when the grade is C+	12		C+	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	2.3	calculate	2.3	
89	Testing gpa to be 2 when the grade is C	12		C	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	2	calculate	2	
90	Testing gpa to be 1.7 when the grade is C-	12		C-	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	1.7	calculate	1.7	
91	Testing gpa to be 1.3 when the grade is D+	12		D+	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	1.3	calculate	1.3	
92	Testing gpa to be 1 when the grade is D	12		D	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	1	calculate	1	

Scen #	Scenario Description	Req #	Cond #	Test Data	Test Conditions/Steps	Expected Results/Comments	Post-Conditions	Actual Results	Pass/Fail (Y/N)
93	Testing gpa to be 0 when the grade is F	12		F	1. Open the GPA Calculator program 2. Enter all marks 3. Press calculate	0	calculate	0	