

Program 7: Permutations and Combinations

Test Cases

Test Number	Test Description	n	r	P (n, r) – repeats	P (n, r) – no repeats	C (n, r) – repeats	C (n, r) – no repeats	Output
1	Both valid numbers	23	6	148,035,889	72,681,840	376,740	100,947	Answers message
2	Both valid numbers	3	1	3	3	3	3	Answers message
3	Non-integer entered for n	hello		-	-	-	-	Invalid input message
4	Non-integer entered for r	10	hi	-	-	-	-	Invalid input message
5	Negative integer entered for n	-20		-	-	-	-	Invalid input message
6	Negative integer entered for r	16	-3	-	-	-	-	Invalid input message
7	r entered is greater than n. ($n < r$)	32	65	-	-	-	-	Calculation not possible message.