algo/pseudocode

Act1
make a list for the names
loop until user says "done"
inside loop ask name input
if user input equals "done" stop loop
else add to the list
after loop convert every name in list to uppercase then display all of em
count how many names starts with letter A using startswith()
show that count

Act 2
start loop forever
ask user price decimal
if price = -1 break
if price < 0 then nah try again
if ok add to list
loop again
after loop print count of list items
print avg price
print max price
print min price
done

Act 3
make a list stick 5 names in it
ask user 1 char they wanna find
turn that char lowercase same for each name
loop each name see if it has that char
if has it spit the name out
done

Act 4
ask user 5x for birth year store in list<string>
for each birth year check if its numeric else retry that input
convert string to int
get age = currentyear - birthyear
if age < 18 minor
else if age < 60 adult
else senior
print birthyear age classification

Act 5

loop till 7 valid grades added to list
ask grade from user each time

try convert string to int
if not int or <0 or >100 then loop back ask again
else push into list
after got all 7
make counter for each letter A B C D F all start 0
loop each grade
switch based on range so maybe do if inside switch or set case by group
add 1 to the matching letter counter
after done print how many A's how many B's etc

Act 6
loop asking city name dump into list
if user types exit then break loop
after loop remove all same names (duplicates)
sort the list abc order
print all city names

Act 7
make list to hold 8 prod names
loop until got 8 ask prod name add to list
ask user keyword to search
convert keyword to lowercase
loop through each item in list if it contains keyword lowercase add to new list results
if results empty print no products found
else print results all
Act 8
inside a loop ask user for 10 nums store in list
after done make another list only grab nums > 50 using filter/loop
count how many in original and filtered lists
print the counts
Act 9

ask user 6 names full names
for each name split by space
for each word in that split make first letter uppercase then the rest lowercase
rejoin all the words back to one string
add each fixed name to a list
after loop print the list one by one

Act 10
ask user 12 nums
make two empty lists even & odd
loop 12 times ask num add to original list
inside loop check num mod 2 if zero add to even else add to odd
after loop print both lists separately
make sure original list untouched
Act 11

make two lists names & salaries
ask how many employees to input
loop that many times asking name & salary convert salary to float put into both lists
after done looping go through salaries list with index
if salary < 15000 then add 5%
else if salary >=15000 and <=30000 then add 3%
else keep same
after all are adjusted loop again both lists printing only those with salary > 25000

Act 12
inventory restocker
make 2 lists, one for names one for counts
loop 10 times ask name + stock count, store in both lists
inside loop if count < 10 then add 20 to it and maybe note it got restocked
else leave it
after loop print each item name, stock, if it got restocked or not
Act 13

inside a loop counter 1-10 ask user input name and quiz score store both in list
nameList and scoreList convert score to int
after filling both lists make a combined list of name and score as pairs
sort that combined list based on score high to low using sort with compare logic
output first 3 from sorted list names and scores
stop

Act 14
make 2 lists one for countrynames one for capnames
ask user type a country
convert what they typed to lowercase
loop through the list check each country in lowercase if it matches what they typed
if match found get same index from cap list print that
if after loop no match then print country not found
Act 15
inside a loop til count hits 6
ask for course code input
if length not 5 then error say wrong length, loop again without adding
else if code already in list using contains() then error say duplicate, loop again
else add to list and say success
when reached 6 print all valid codes in the list and stop
Act 16

inside while loop
show menu with choices add / remove / view / clear / exit
switch case based on choice
if add ask item name push it to cart list
if remove ask item name if in cart then delete it if not prompt not found
if view just show all items in cart

if clear then empty the list
loop again until exit choice break

Act 17

inside a loop for 5 times ask user to enter sentence
split sentence by spaces to get words
for each word lowercase it check if it's not already in list then add it
after loop done sort the list alphabetically
print total count of words
print each word in sorted list

Act 18

inside loop
ask for words (list) store in container thingy for orig words
loop thru each word in the list
make another version where every vowel (aeiou AEIOU) gets swapped with *
store that modded version in another list
after loop done print both lists side by side one orig one changed

Act 19

online attendance thing
inside loop ask user name until they done typing (like maybe blank means stop)
check if name not empty and not yet on the list use contains() then add it
if already in list then skip it
after loop sort the list alphabetically
print total count then print all names in order

Act 20

loop until got 10 grades
ask for number grade convert string to int
if below 0 or above 100 then loop again ask new input
else store that grade in list
use switch case check what range grade falls under then mark letter grade
increment counter for that letter grade
after all 10 inputs print out how many A B C D F
also print out the original list of grades