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# 1A. use a for loop to print a square of size n = 5
n = 5
for i in range(n):
  for j in range(n):
    print("*",end=" ")
  print()
# 1B. use a for loop to print a triangle of size n = 9
n = 10
for i in range(n):
  for j in range(i):
    print("*",end=" ")
  print()
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# 1C. use a for loop to print a checkerboard of size n = 8 with white and
n = 8
for i in range(n):
  for j in range(n):
    if (i + j) % 2 == 0:
      print(" ",end=" ")
    else:
      print("*", end=" ")
  print()
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# 2A. use a while loop to print a square of size n = 5
i = 0
n = 5
while i < n:
  j = 0
  while j < n:
     print("X",end=" ")
     j = j + 1
  i = i + 1
  print()
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      X \quad X \quad X \quad X \quad X
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# 2B. use a while loop to print a triangle of size n = 9
i = 0
n = 10
while i < n:
   j = 0
  while j < i:
     print("X", end=" ")
     j = j + 1
  i = i + 1
  print()
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# 2C. use a while loop to print a checkerboard of size n = 8 with white an
i = 0
n = 8
while i <= n:
   j = 0
  whil≏ i <= n•
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    if (i + j) % 2 == 0:
      print(" ",end=" ")
    else:
     print("*", end=" ")
    j = j + 1
  i = i + 1
 print()
# 3. print a square of size n = 20
     for vertical boundaries use '|'
     for horizontal boundaries use '-'
     for corners use '*'
n = 20
for i in range(n): # row
  for j in range(n): # column
    if j == 0 and i == 0 or j == (n-1) and i == (n-1) or j == 0 and i == (n-1)
      print("*", end=" ")
    elif i == 0 or i == (n - 1):
      print("-", end=" ")
    elif j == 0 or j == (n - 1):
      print("|", end=" ")
    else:
      print(" ", end=" ")
 print()
```