

PERFORM MAINT FILE NAME/TYPE= STDIN  
PERFORM MAINT  
PERFORM MAINT CREATION DATE/TIME= 14-02-2025 16:25:27  
PERFORM MAINT  
PERFORM MAINT FILE= 001    PAGES= 0001    LINES= 000015  
PERFORM MAINT  
PERFORM MAINT SYSTEM= LINUX(6.11.2-AMD64)  
PERFORM MAINT  
PERFORM MAINT SYSID= ACID    SYSUSER= ACID  
PERFORM MAINT  
PERFORM MAINT FORM= STANDARD  
PERFORM MAINT  
PERFORM MAINT CHAR= FONTMONO  
PERFORM MAINT  
PERFORM MAINT PRT1403 VERSION= 1.2

          M      M      AAA      IIIIII      N      NN      TTTTTTTT  
          MM      MM      AAAAA      IIIIII      NN      NN      TTTTTTTT  
          MMM     MMM     AA      AA      II      NNN      NN      TT  
          MMMM  MMMM  AA      AA      II      NNNN      NN      TT  
          MM  MMM  MM  AA      AA      II      NN  NN      NN      TT  
          MM  M   MM  AAAAAAAAA      II      NN      NN  NN      TT  
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          PPPPPPPP  EEEEEEEEEE  RRRRRRRRR  FFFFFFFFF  0000000  RRRRRRRRR  M      M  
          PPPPPPPPPP  EEEEEEEEEE  RRRRRRRRRR  FFFFFFFFF  000000000  RRRRRRRRRR  MM      MM  
          PP      PP  EE          RR      RR  FF          00      00  RR      RR  MMM      MMM  
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```
1 import time
2
3 def sum_integers():
4     total = 0
5     for i in range(1, 10**7):
6         total += i
7     return total
8
9 start_time = time.time()
10 result = sum_integers()
11 end_time = time.time()
12
13 print(f"Python: The sum is {result}")
14 print(f"Python: Time taken = {end_time - start_time} seconds")
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PERFORM MAINT FILE NAME/TYPE= STDIN  
PERFORM MAINT  
PERFORM MAINT CREATION DATE/TIME= 14-02-2025 16:25:27  
PERFORM MAINT  
PERFORM MAINT FILE= 002    PAGES= 0001    LINES= 000018  
PERFORM MAINT  
PERFORM MAINT SYSTEM= LINUX(6.11.2-AMD64)  
PERFORM MAINT  
PERFORM MAINT SYSID= ACID    SYSUSER= ACID  
PERFORM MAINT  
PERFORM MAINT FORM= STANDARD  
PERFORM MAINT  
PERFORM MAINT CHAR= FONTMONO  
PERFORM MAINT  
PERFORM MAINT PRT1403 VERSION= 1.2

          M      M      AAA      IIIIII      N      NN      TTTTTTTT  
          MM      MM      AAAA      IIIIII      NN      NN      TTTTTTTT  
          MMM     MMM     AA      AA      II      NNN      NN      TT  
          MMMM  MMMM  AA      AA      II      NNNN      NN      TT  
          MM  MMM  MM  AA      AA      II      NN  NN      NN      TT  
          MM  M   MM  AAAAAAAA      II      NN      NN  NN      TT  
          MM      MM  AAAAAAAA      II      NN      NNNN      TT  
          MM      MM  AA      AA      II      NN      NNN      TT  
          MM      MM  AA      AA      IIIIII      NN      NN      TT  
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          PPPPPPPP  EEEEEEEE  RRRRRRRR  FFFFFFFF  000000000  RRRRRRRR  MM     MM  
          PP     PP  EE         RR     RR  FF         00     00  RR     RR  MMM     MMM  
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          PP         EE         RR  RR  FF         00     00  RR  RR     MM     MM  
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```
1 program performance_test
2   implicit none
3   integer :: i, total
4   real(8) :: start_time, end_time
5
6   total = 0
7   call cpu_time(start_time)
8
9   do i = 1, 10000000
10      total = total + i
11   end do
12
13   call cpu_time(end_time)
14
15   print *, "Fortran: The sum is ", total
16   print *, "Fortran: Time taken = ", end_time - start_time
17 end program performance_test
```

PERFORM MAINT FILE NAME/TYPE= STDIN  
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PERFORM MAINT FILE= 003    PAGES= 0001    LINES= 000022  
PERFORM MAINT  
PERFORM MAINT SYSTEM= LINUX(6.11.2-AMD64)  
PERFORM MAINT  
PERFORM MAINT SYSID= ACID    SYSUSER= ACID  
PERFORM MAINT  
PERFORM MAINT FORM= STANDARD  
PERFORM MAINT  
PERFORM MAINT CHAR= FONTMONO  
PERFORM MAINT  
PERFORM MAINT PRT1403 VERSION= 1.2

          M      M      AAA      IIIIII      N      NN      TTTTTTTT  
          MM      MM      AAAAA      IIIIII      NN      NN      TTTTTTTT  
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          MM      MM  AAAAAAAAA      II      NN      NNNN      TT  
          MM      MM  AA      AA      II      NN      NNN      TT  
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```
1 #include <stdio.h>
2 #include <time.h>
3
4 int main() {
5     long i;
6     long total = 0;
7     clock_t start_time, end_time;
8
9     start_time = clock();
10
11     for (i = 1; i < 100000000; i++) {
12         total += i;
13     }
14
15     end_time = clock();
16
17     printf("C: The sum is %ld\n", total);
18     printf("C: Time taken = %lf seconds\n", (double)(end_time - start_time) / CLOCKS_PER_SEC);
19
20     return 0;
21 }
```