PERFORM MAINT FILE NAME/TYPE= STDIN
PERFORM MAINT
PERFORM MAINT CREATION DATE/TIME= 26-02-2025 12:04:03
PERFORM MAINT
PERFORM MAINT FILE= 001 PAGES= 0001 LINES= 000015
PERFORM MAINT
PERFORM MAINT SYSTEM= LINUX(6.12.13-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= 1.3

```
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
MM     MM AAAAAAAAA    II     NN   NNNN    TT
MM     MM AA     AA    II     NN    NNN    TT
MM     MM AA     AA  IIIIII   NN     NN    TT
MM     MM AA     AA  IIIIII   NN      N    TT


PPPPPPPP  EEEEEEEEE RRRRRRRR  FFFFFFFFF  OOOOOOO  RRRRRRRR  M       M
PPPPPPPPP EEEEEEEEE RRRRRRRRR FFFFFFFFF OOOOOOOOO RRRRRRRRR MM     MM
PP     PP EE        RR     RR FF        OO     OO RR     RR MMM   MMM
PP     PP EE        RR     RR FF        OO     OO RR     RR MMMM MMMM
PPPPPPPPP EEEEEEEEE RRRRRRRRR FFFFFFFFF OO     OO RRRRRRRRR MM MMM MM
PPPPPPPP  EEEEEEEEE RRRRRRRR  FFFFFFFFF OO     OO RRRRRRRR  MM  M  MM
PP        EE        RR  RR    FF        OO     OO RR  RR    MM     MM
PP        EE        RR   RR   FF        OO     OO RR   RR   MM     MM
PP        EEEEEEEEE RR    RR  FF        OOOOOOOOO RR    RR  MM     MM
PP        EEEEEEEEE RR     RR FF         OOOOOOO  RR     RR MM     MM


     00000     00000      1
    0000000   0000000    11
   00     00 00     00   111
   00     00 00     00    11
   00     00 00     00    11
   00     00 00     00    11
   00     00 00     00    11
    0000000   0000000   111111
     00000     00000    111111
```

```python
import time

def sum_integers():
    total = 0
    for i in range(1, 10**7):
        total += i
    return total

start_time = time.time()
result = sum_integers()
end_time = time.time()

print(f"Python: The sum is {result}")
print(f"Python: Time taken = {end_time - start_time} seconds")
```

PERFORM MAINT FILE NAME/TYPE= STDIN
PERFORM MAINT
PERFORM MAINT CREATION DATE/TIME= 26-02-2025 12:04:03
PERFORM MAINT
PERFORM MAINT FILE= 002 PAGES= 0001 LINES= 000018
PERFORM MAINT
PERFORM MAINT SYSTEM= LINUX(6.12.13-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= 1.3

```
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
MM     MM AAAAAAAAA    II     NN   NNNN    TT
MM     MM AA     AA    II     NN    NNN    TT
MM     MM AA     AA  IIIIII   NN     NN    TT
MM     MM AA     AA  IIIIII   NN      N    TT


PPPPPPPP  EEEEEEEEE RRRRRRRR  FFFFFFFFF  OOOOOOO  RRRRRRRR  M       M
PPPPPPPPP EEEEEEEEE RRRRRRRRR FFFFFFFFF OOOOOOOOO RRRRRRRRR MM     MM
PP     PP EE        RR     RR FF        OO     OO RR     RR MMM   MMM
PP     PP EE        RR     RR FF        OO     OO RR     RR MMMM MMMM
PPPPPPPPP EEEEEEEEE RRRRRRRRR FFFFFFFFF OO     OO RRRRRRRRR MM MMM MM
PPPPPPPP  EEEEEEEEE RRRRRRRR  FFFFFFFFF OO     OO RRRRRRRR  MM  M  MM
PP        EE        RR  RR    FF        OO     OO RR  RR    MM     MM
PP        EE        RR   RR   FF        OO     OO RR   RR   MM     MM
PP        EEEEEEEEE RR    RR  FF        OOOOOOOOO RR    RR  MM     MM
PP        EEEEEEEEE RR     RR FF         OOOOOOO  RR     RR MM     MM


     00000     00000    2222222
    0000000   0000000  222222222
   00     00 00     00 22     22
   00     00 00     00       22
   00     00 00     00      22
   00     00 00     00     22
   00     00 00     00    22
    0000000   0000000   22222222
     00000     00000   222222222
```

```
program performance_test
    implicit none
    integer :: i, total
    real(8) :: start_time, end_time

    total = 0
    call cpu_time(start_time)

    do i = 1, 10000000
        total = total + i
    end do

    call cpu_time(end_time)

    print *, "Fortran: The sum is ", total
    print *, "Fortran: Time taken = ", end_time - start_time
end program performance_test
```

PERFORM MAINT FILE NAME/TYPE= STDIN
PERFORM MAINT
PERFORM MAINT CREATION DATE/TIME= 26-02-2025 12:04:03
PERFORM MAINT
PERFORM MAINT FILE= 003 PAGES= 0001 LINES= 000022
PERFORM MAINT
PERFORM MAINT SYSTEM= LINUX(6.12.13-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= 1.3

```
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
MM     MM AAAAAAAAA    II     NN   NNNN    TT
MM     MM AA     AA    II     NN    NNN    TT
MM     MM AA     AA  IIIIII   NN     NN    TT
MM     MM AA     AA  IIIIII   NN      N    TT


PPPPPPPP  EEEEEEEEE RRRRRRRR  FFFFFFFFF  OOOOOOO  RRRRRRRR  M       M
PPPPPPPPP EEEEEEEEE RRRRRRRRR FFFFFFFFF OOOOOOOOO RRRRRRRRR MM     MM
PP     PP EE        RR     RR FF        OO     OO RR     RR MMM   MMM
PP     PP EE        RR     RR FF        OO     OO RR     RR MMMM MMMM
PPPPPPPPP EEEEEEEEE RRRRRRRRR FFFFFFFFF OO     OO RRRRRRRRR MM MMM MM
PPPPPPPP  EEEEEEEEE RRRRRRRR  FFFFFFFFF OO     OO RRRRRRRR  MM  M  MM
PP        EE        RR  RR    FF        OO     OO RR  RR    MM     MM
PP        EE        RR   RR   FF        OO     OO RR   RR   MM     MM
PP        EEEEEEEEE RR    RR  FF        OOOOOOOOO RR    RR  MM     MM
PP        EEEEEEEEE RR     RR FF         OOOOOOO  RR     RR MM     MM


          00000     00000    3333333
         0000000   0000000  333333333
        00     00 00     00 33     33
        00     00 00     00        33
        00     00 00     00      333
        00     00 00     00      333
        00     00 00     00        33
        00     00 00     00 33     33
         0000000   0000000  333333333
          00000     00000    3333333
```

```c
#include <stdio.h>
#include <time.h>

int main() {
    long i;
    long total = 0;
    clock_t start_time, end_time;

    start_time = clock();

    for (i = 1; i < 10000000; i++) {
        total += i;
    }

    end_time = clock();

    printf("C: The sum is %ld\n", total);
    printf("C: Time taken = %lf seconds\n", (double)(end_time - start_time) / CLOCKS_PER_SEC);

    return 0;
}
```