

PROBLEM 1: MULTIPLES OF 3 AND 5

main.c		Run	Output
<pre>1 #include <stdio.h> 2 3 int main() 4 { 5 int sum = 0; 6 7 for(int i = 1; i < 1000; i++) 8 { 9 sum += (!(i%3) !(i%5)); 10 } 11 12 printf("%d\n", sum); 13 14 return 0; 15 }</pre>			<pre>/tmp/U2X3NTPHke.o 233168</pre>

PROBLEM 2: EVEN FIBONACCI

main.c		Run	Output
<pre>1 #include <stdio.h> 2 3 int main(void) 4 { 5 unsigned int a1 = 1, a2 = 1, a3 = 2, sum = 0; 6 7 while (a3 < 4000000) { 8 a3 = a1 + a2; 9 sum += a3 * !(a3%2); 10 a1 = a2; 11 a2 = a3; 12 } 13 14 printf("%u\n", sum); 15 16 return 0; 17 }</pre>			<pre>/tmp/U2X3NTPHke.o 4613732</pre>

PROBLEM 3: LARGEST PRIME FACTOR

main.c		Run	Output
<pre>1 #include<stdio.h> 2 #include<math.h> 3 int primef(long int n) 4 { 5 int i,max; 6 while(n%2==0) 7 { 8 max=2; 9 n=n/2; 10 } 11 for(i=3;i<=sqrt(n);i+=2) 12 { 13 while(n%i==0) 14 { 15 max=i; 16 n=n/i; 17 } 18 } 19 if(n>2) 20 { 21 max=n; 22 } 23 printf("%d",max); 24 } 25 int main() 26 { 27 primef(600851475143); 28 }</pre>			<pre>/tmp/ji8FEj2MCD.o 6857</pre>

PROBLEM 5: SMALLEST MULTIPLE

Main.java	Run	Output
<pre>1- public class Main { 2 3- public static void main(String[] args) { 4 5 int number = -1; 6 7- for (int i = 20; i < Integer.MAX_VALUE; i++) { 8- if (i % 20 == 0 && i % 19 == 0 && i % 18 == 0 && i % 17 == 0 && i % 16 == 0 && i % 14 == 0 && i % 13 == 0 && i % 11 == 0) { 9 number = i; 10 break; 11 } 12 } 13 14 System.out.println(number); 15 16 } 17 18 }</pre>		<pre>java -cp /tmp/q13oADj8jV Main 232792560</pre>

PROBLEM 6: SUM SQUARE DIFFERENCE

main.py	Run	Shell
<pre>1- def sum_square_difference(n): 2 numbers = range(1, n+1) 3 sum_squares = sum(i**2 for i in numbers) 4 square_sum = sum(numbers)**2 5 return square_sum - sum_squares 6 7 print(sum_square_difference(100))</pre>		<pre>25164150 ></pre>

PROBLEM 9: SPECIAL PYTHOGOREAN TRIPLET

main.c	Run	Output
<pre>1 #include <stdio.h> 2 3 int main(void) 4 { 5 int a, b; 6 7 for (a = 1; a <= 333; a++) { 8 for (b = a; b <= 666; b++) { 9 int c = (1000 - a - b); 10 if (a*a + b*b == c*c) { 11 printf("%d\n", a * b * c); 12 } 13 } 14 } 15 return 0; 16 }</pre>		<pre>/tmp/U2X3NTPHke.o 31875000</pre>