1. Show how the lambda calculus expression reduces to .
2. The following function f is said to be impure, show example invocations including their inputs, results and side-effects.

* void f(int \*x, int y){  
   \*x = \*x + y;  
   printf("%d\n",\*x);  
   return;  
  }  
  int main(void) {  
   int x = 0;  
   f(&x, 3);  
   x = x - 2;  
   f(&x, 3);  
  }

1. Show the curried lambda form of the following multi-parameter function: plus x y z = x + y + z. *Bonus points if you can show the corresponding lambda calculus expression given some lambda expression as an alias of the addition expression*.