Lab 2 Solutions

Exercise Youth Hostel

```c
#include <stdio.h>

int main() {
   int time = 0;
   int price = 0;
  scanf("%d", &time);
  price = 10 + (time*5);
  if ( price >= 53){
     printf("53\n");
  }else{
     printf("%d\n", price);
  }
   return 0;
}
```

Exercise Fantastic Cookie Recipe

```c
#include <stdio.h>

int main() {
   int i,m,n;
  int array[10];
  for(i=0;i<10;i++){
     scanf("%d", &array[i]);
    }
  scanf("%d", &m);
   n = array[m-1];
   printf("%d\n",n );
   return 0;
}
```

Exercise Tug of War

```c
#include <stdio.h>
int main()
{
    int num, i, sum1, sum2, weight1, weight2;
    sum1 = 0;
    sum2 = 0;
    scanf("%d", &num);
    for(i = 0; i < num; i++) {
        scanf("%d", &weight1);
        sum1 = sum1 + weight1;
        scanf("%d", &weight2);
        sum2 = sum2 + weight2;
    }
    if(sum1 >= sum2) {
        printf("Team 1 has an advantage\n");
    } else {
        printf("Team 2 has an advantage\n");
    }
    printf("Total weight for team 1: %d\n", sum1);
    printf("Total weight for team 2: %d\n", sum2);

    return 0;
}
```

Exercise Balanced Train Wagons

```c
#include <stdio.h>
int main() {
    int num;
    int i;
    double sum = 0;
    double avg;
    scanf("%d", &num);
    double array1[num];
    double array2[num];
    for(i=0; i<num; i++){
        scanf("%lf", &array1[i]);
        sum = sum + array1[i];
    }
    avg = sum/num;
    for(i=0; i<num; i++){
    array2[i] = avg - array1[i];
    }
    for(i=0; i<num; i++){
        printf("%.1lf\n", array2[i]);
    }
    return 0;
}
```