```
void dynArrayAddAt (struct DynArr * da, int index, TYPE val) {
         assert(da!=0);
         assert(index >= da->size); //because it does not overwrite a value.
           if(index == da->capacity)
           {
                  int tempSize = da->size;
                  int I;
                  struct DynArr* newArray = (struct DynArr*)malloc(sizeof(struct DynArrr)*2*da-
>capacity));
                  for(i=0; i < da->size; i++)
                   newArray[i] = da->data[i];
                  free(da->data);
                  da->data = newArray;
           }
           da->data[index] = val;
           da->size = tempSize;
           da->size++;
 }
```