#1.
a) Write the appropriate `save` instruction to allocate stack space for the following local variables and any padding.

```c
short a;
long b;
short c;
int d;
char e;
unsigned short f;
```

```
save _______ , ______________________________ , _________
(Use the formula, not an absolute value)
```

b) Write the appropriate unoptimized SPARC assembly instructions using the above local variables.

```asm
a = c;

f = 0xBABE;

b = d;

e = 'W';
```
#2. a) Write the appropriate `save` instruction to allocate stack space for the following local variable declaration.

```
int a[5];
```

```
save  ,  ,
(Use the formula, not an absolute value)
```

b) Write the appropriate instructions to perform the following assignment statements.

```
a[4] = a[2];
```

```
________________________
________________________
```

```
a[1] = a[0];
```

```
________________________
________________________
```

```
int *ptr; /* ptr mapped to %l4 */
ptr = &a[3];
```

```
________________________
```

```
++ptr; /* ptr mapped to %l4 */
```

```
________________________
```

```
int d = *ptr; /* d mapped to %l2; ptr to %l4 */
```

```
________________________
```

```
*ptr = d; /* d mapped to %l2; ptr to %l4 */
```

```
________________________
```

#3. Give the equivalent C array expression for the following pointer expression.

```
*(a + 5)  is equivalent to _____________________________ (equivalent array expression).
```