Quiz 3 Sol.

```
struct node* linklist creator(struct node* head){
 struct node** lastref = &head;
 int i;
 for( i=0; i < 6; i++){
    *lastref = (struct node*) malloc(sizeof(struct node));
    *lastref -> data = i;
    *lastref = (*lastref)->next;
 return head;
```

Notation

Address

Var name Value

Ex

Int a=10;

1234

a

10

Notation

Address

Var name Value

Ex

Int *b=a;

b 1234

```
struct node* linklist creator(struct node* head){
 struct node** lastref = &head;
 int i;
 for(i=0; i < 6; i++)
    *lastref = (struct node*) malloc(sizeof(struct node));
    *lastref -> data = i;
    *lastref = (*lastref)->next;
 return head;
                        0x20
lastref 0x10
                                  0x40
                        0x30
                        data
                              0 next
                                       NULL
0x10
head
     0x20
```

```
struct node* linklist creator(struct node* head){
 struct node** lastref = &head;
 int i;
 for(i=0; i < 6; i++){}
    *lastref = (struct node*) malloc(sizeof(struct node));
    *lastref -> data = i;
    *lastref = (*lastref)->next;
 return head;
                         0x20
lastref 0x10
                                  0x40
                         0x30
                         data
                               0 next
                                        NULL
0x10
head
      NULL
```

```
struct node* linklist creator(struct node* head){
 struct node** lastref = &head;
 int i;
 for(i=0; i < 6; i++){}
    *lastref = (struct node*) malloc(sizeof(struct node));
    *lastref -> data = i;
    *lastref = (*lastref)->next;
 return head;
                        0x20
lastref 0x10
                                  0x40
                        0x30
                        data 0 next NULL
0x10
                        0x50
head
     0x50
                        0x60
                                 0x70
                        data
                                        NULL
                                 next
```

0x20 0x30 0x40 data 0 next NULL 0x50 0x60 0x70 data 1 next NULL 0x80 0x90 0xa0 data 2 next NULL

lastref 0x10

0x10 head 0x80

Solution

```
struct node* linklist creator(struct node* head){
 struct node** lastref = &head;
 int i;
 for(i=0; i < 6; i++)
    *lastref = (struct node*) malloc(sizeof(struct node));
    *lastref -> data = i;
    lastref = &((*lastref)->next);
 return head;
                        0x20
lastref 0x10
                                  0x40
                        0x30
                        data
                              0 next
                                       NULL
0x10
head
     0x20
```

```
struct node* linklist creator(struct node* head){
 struct node** lastref = &head;
 int i;
 for (i=0; i < 6; i++)
    *lastref = (struct node*) malloc(sizeof(struct node));
    *lastref -> data = i;
    lastref = &((*lastref)->next);
 return head;
                        0x20
lastref 0x40
                                 0x40
                        0x30
                        data 0
                                next
                                       NULL
0x10
                        0x50
head
     0x20
                        0x60
                                 0x70
                        data
                                        0x80
                                 next
```

```
struct node* linklist creator(struct node* head){
 struct node** lastref = &head;
 int i;
 for (i=0; i < 6; i++)
    *lastref = (struct node*) malloc(sizeof(struct node));
    *lastref -> data = i;
    lastref = &((*lastref)->next);
 return head;
                        0x20
lastref 0x40
                                  0x40
                        0x30
                        data 0
                                next
                                       0x50
0x10
                        0x50
head
     0x20
                        0x60
                                  0x70
                        data
                                        0x80
                                  next
```

0x20 0x30 0x40 data 0 next 0x50 0x50 0x60 0x70 data 1 next 0x80 0x80 0x90 0xa0 data 2 next 0xb0

lastref 0xf0

0x10 head 0x20

•

Questions?