

// Online C++ compiler to run C++ program online

```
#include <iostream>
```

```
struct node
```

```
{
```

```
    node *back;
```

```
    int data;
```

```
    node *next;
```

```
};
```

```
using namespace std;
```

```
int main() {
```

```
    node *nptr,*header=NULL, *tptr, *tail;
```

```
    for (int i = 3; i<8;i+=2){
```

```
        nptr = new node;
```

```
        nptr->back = NULL;
```

```
        nptr->data =  i;
```

```
        nptr->next =  NULL;
```

```
        if(header ==NULL){
```

```
            header = nptr;
```

```
            tptr = nptr;
```

```
        }
```

```
        else{
```

```
            tptr->next = nptr;
```

```
            nptr->back = tptr;
```

```
            tptr= nptr;
```

```
        }
```

```
    }
```

```
    tail = tptr;
```

```
    tptr=header;
```

```
    while (tptr!=NULL){
```

```
    cout<<"tptr->data "<<tptr->data<<endl;
    cout<<"tptr->next "<<tptr->next<<endl;
    cout<<"tptr->back "<<tptr->back<<endl;
    tptr=tptr->next;
}
tptr=tail;
while (tptr!=NULL){
    cout<<"tptr->data "<<tptr->data<<endl;
    cout<<"tptr->next "<<tptr->next<<endl;
    cout<<"tptr->back "<<tptr->back<<endl;
    tptr=tptr->back;
}

return 0;
}
```