```
#include "prj.h"

const char* team[6] = { "Mercedes", "Redbull", "Mclaren", "Alpine", "Haas",
"Porsche"};
const char* pos[3] = { "main_driver", "substitute_driver", "test_driver" };
void fill_data(struct f1player_se* x, int clock_time) // if you send this function
an address of a struct f1player_se it will assign the struct random application
information

{
	int i;
	int numb;
	static int val = 10001;
	x->id = val;
	val += 1 + (rand() % 7);
	x->app_date = clock_time;
	x->time_in = 0;
	numb = rand() % 3;
	strcpy(x->pos_desired, pos[numb]);
	numb = rand() % 6;
	strcpy(x->prev_team, team[numb]);
	x->wins = (rand() % 50);
	x->avg_skill_score = (rand() % 10);
	x->qual_point = (rand() % 250);
	x->race_point = (rand() % 1000);
	x->next = NULL;
}
struct f1player_se* check_for_app(struct f1player_se* head, int x) { // used in
main, if you enter an application id it returns a pointer to the struct with that
id,
	// if no such id is in link list it returns NULL

	while (head != NULL)
	{
		if (head->id == x)
			break;
		head = head->next;
	}
	return head;
}
struct f1player_se* make_init_list(int clock_time) // makes an initial list of
applications
{
	struct f1player_se* h;
	struct f1player_se* ptr;
	struct f1player_se* last;
	int i;
	h = (struct f1player_se*)malloc(sizeof(struct f1player_se));
	fill_data(h, clock_time);
	last = h;
	for (i = 0; i < 20; i++)
	{
		ptr = (struct f1player_se*)malloc(sizeof(struct f1player_se));
		fill_data(ptr, clock_time);
		last->next = ptr;
		last = last->next;
	}
	return h;
}
```

```
struct f1player_se* new_apps(int clock_time)
{
	struct f1player_se* head;
	struct f1player_se* ptr, * prev;
	int num = 3;
	int i;
	num = num + (rand() % 5);
	head = (struct f1player_se*)malloc(sizeof(struct f1player_se));
	fill_data(head, clock_time);
	prev = head;
	for (i = 0; i < num - 1; i++)
	{
		ptr = (struct f1player_se*)malloc(sizeof(struct f1player_se));
		fill_data(ptr, clock_time);
		prev->next = ptr;
		prev = ptr;
	}
	return head;
}
void print_apps(struct f1player_se* x, struct top_app* y)
{
	struct f1player_se* ptr;
	ptr = (struct f1player_se*)malloc(sizeof(struct f1player_se));
	ptr = x;
	int skill = 6;

	// pointer next_app
	printf("Applicants:\n");
	printf("%s %3s %11s %s %10s %14s %7s %s %s %s %10s\n", "pointer", "id",
"app_date", "time_in", "prev_team", "pos_desired", "wins", "qual_point",
"race_point", "skill_score", "next app");

	while (ptr != NULL)
	{ // ptr ptr->next
		printf("%d %d %4d %8d %12s %18s %3d %5d %13d %8d %16d\n", ptr, ptr->id,
ptr->app_date, ptr->time_in, ptr->prev_team, ptr->pos_desired, ptr->wins, ptr-
>qual_point, ptr->race_point, ptr->avg_skill_score, ptr->next);
		ptr = ptr->next;
	}



}
```