

```

jet.c:21:3: error: 'time_s' undeclared (first use in this function)
  21 |     time_s = takeoff_speed_mps/accelaration_m/s^2; /* v=u+at */
      |     ^~~~~~
jet.c:28:11: error: expected ';' before '}' token
  28 |     return 0 }
      |           ^~
      |           ;
it24103483@MLBVDI-LNN-053:~/Desktop$ gcc jet.c -o jet.o
jet.c: In function 'main':
jet.c:20:37: error: invalid operands to binary ^ (have 'double' and 'double')
  20 |     accelaration = (takeoff_speed_mps)^2/distance_m*2; /* v^2=u^2+ 2as */
      |                                ^~~~~~
      |                                |
      |                                double
it24103483@MLBVDI-LNN-053:~/Desktop$ gcc jet.c -o jet.o
it24103483@MLBVDI-LNN-053:~/Desktop$ ./jet.o
takeoff speed of a jet (km/hr):278
distance over which the catapult accelarates the jet(m):94
predicted accelaration:280273.77 m/s^2
predicted time:0.00 seconds
it24103483@MLBVDI-LNN-053:~/Desktop$ 

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it24103483@MLBVDI-LNN-053: ~/Desktop
it24103483@MLBVDI-LNN-053:~/Desktop$ cd Desktop
it24103483@MLBVDI-LNN-053:~/Desktop$ vim jet.c
it24103483@MLBVDI-LNN-053:~/Desktop$ gcc jet.c -o jet.o
jet.c: In function 'main':
jet.c:8:24: error: expected '=', ',', ';', 'asm' or '__attribute__' before '/'
token
    8 |     double accelaration_m/s^2, time_s; /* output */
      |                               ^
jet.c:8:24: error: expected expression before '/' token
jet.c:16:16: error: expected expression before '%' token
    16 |     scanf("%lf", %distance_m);
      |                   ^
jet.c:20:3: error: 'accelaration_m' undeclared (first use in this function)
    20 |     accelaration_m/s^2 = (takeoff_speed_mps)^2/distance_m*2; /* v^2=u^2+
2as */
      |     ^~~~~~
jet.c:20:3: note: each undeclared identifier is reported only once for each fun
ction it appears in
jet.c:20:18: error: 's' undeclared (first use in this function)
    20 |     accelaration_m/s^2 = (takeoff_speed_mps)^2/distance_m*2; /* v^2=u^2+
2as */
      |                   ^
jet.c:20:43: error: invalid operands to binary ^ (have 'double' and 'double')
    20 |     accelaration_m/s^2 = (takeoff_speed_mps)^2/distance_m*2; /* v^2=u^2+
```

```
Open  [icon] jet.c ~/Desktop Save [icon] - □ ×

1 /* calculate acceleration of a jet and time */
2
3 #include <stdio.h>
4 #include <math.h>
5 int main() {
6
7     double takeoff_speed_kmph, takeoff_speed_mps, distance_m; /* input */
8     double acceleration, time_s; /* output */
9     /* assumption: acceleration of a jet during a launch is constant and u = 0 */
10
11     printf("takeoff speed of a jet (km/hr):");
12     scanf("%lf", &takeoff_speed_kmph);
13
14
15     printf("distance over which the catapult accelerates the jet(m):");
16     scanf("%lf", &distance_m);
17
18     /* needed calculation */
19     takeoff_speed_mps = takeoff_speed_kmph*1000/3600;
20     acceleration = takeoff_speed_mps*takeoff_speed_mps/2*distance_m; /* v^2=u^2+ 2as */
21     time_s = takeoff_speed_mps/acceleration; /* v=u+at */
22
23
24     printf("predicted acceleration:%.2lf m/s^2\n", acceleration);
25     printf("predicted time:%.2lf seconds\n", time_s);
26
27
28     return 0; }
29
```