**Part 1**

1. break 6
2. run

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1st iteration | 2nd iteration | 3rd iteration | 4th iteration |
| num | 112 | 11 | 1 | 0 |
| rev\_num | 5 | 52 | 521 | 5211 |

1. returns the input integer with it’s digits reversed, so 123 would return 321 and 42 would return 24

**Part 2**

01 #include <stdio.h>

02

03 int main() {

04

05 int letters;

06 int words;

07 char character;

08

09 printf("Enter a Sentence: ");

10

11 while((character=getchar()) != \n){

12 if(character != ' '){

13 if(!space){

14 words++;

15 space=1;

16 }

17 letters++;

18 }else

19 space = 0;

20 }

21

22 printf("Average word length : %.1f", letters/words);

23

24 return 0;

25 }

1. create a variable for space, initialize all ints to 0

int letters = 0;

int words = 0;

int space = 0;

1. add single quotes around \n

while((character=getchar()) != ‘\n’){

1. cast the variables to doubles in the printf, add \n

printf("Average word length : %.1f\n", ((double)letters)/((double)words));

01 #include <stdio.h>

02

03 int main() {

04

05 int letters = 0;

06 int words = 0;

07 int space = 0;

08 char character;

09

10 printf("Enter a Sentence: ");

11

12 while((character=getchar()) != '\n'){

13 if(character != ' '){

14 if(!space){

15 words++;

16 space=1;

17 }

18 letters++;

19 }else

20 space = 0;

21 }

22

23 printf("Average word length : %.1f\n", ((double)letters)/((double)words));

24

25 return 0;

26 }