

```
#include <stdio.h>
```

```
#define MIN_WEIGHT 1
```

```
    // Minimum weight in  
kg
```

```
#define MAX_WEIGHT
```

```
8 // Maximum weight in  
kg
```

```
#define TIME_PER_KG
```

```
7 // Time in minutes per  
kg
```

```
washCycle(int weight) {  
    // Estimate time  
    based on weight  
    int time = weight *  
    TIME_PER_KG;  
    printf("Washing in  
    progress for %d  
    minutes...\n", time);  
}
```

```
int main() {  
    int input;
```

```
int weight;
```

```
while (1) {
```

```
    // Input weight of  
    laundry
```

```
    printf("Enter the  
weight of the laundry  
(in kg, %d to %d, -1 to  
exit): ", MIN_WEIGHT,  
MAX_WEIGHT);
```

```
    scanf("%d",  
&weight);
```

```
// Exit condition
if (weight == -1) {
    printf("Exiting the
program.\n");
    break;
}
```

```
// Validate weight
input
    if (weight <
MIN_WEIGHT || weight
```

```
> MAX_WEIGHT) {  
    printf("Invalid  
weight! Please enter a  
value between %d and  
%d kg.\n", MIN_WEIGHT,  
MAX_WEIGHT);  
    continue; //  
Prompt again  
}
```

```
    printf("Weight  
entered: %d kg\n",
```

weight);

printf("Estimated  
washing time: %d  
minutes\n", weight \*  
TIME\_PER\_KG);

printf("Enter 1 to  
start washing, 0 to stop:  
");

while (1) {  
scanf("%d",

&input);

if (input == 1) {

// Start

washing cycle

washCycle(weight);

break; // Exit

the inner loop to allow

for re-entering weight

} else if (input ==

0) {

```
// Stop
```

```
washing cycle
```

```
printf("Washing  
stopped.\n");
```

```
break; // Exit
```

```
the inner loop
```

```
} else {
```

```
// Handle
```

```
invalid input
```

```
printf("Invalid
```

```
input! Please enter 1 to
```



start or 0 to stop: ");

}

}

}

return 0;

}