Write a C program that will ask the user to input five values corresponding to the grades in **quizzes**(25%), **midterm exam**(20%), **final exam**(25%), **project**(20%) and **recitation**(10%). Compute for the actual total grade based on the read values and their given weights, then transmute the actual total grade to the range 60-100 where passing grade is 60% using the formula .

$$TG = \begin{cases} if\ AG < 60; \left\lfloor 60 + \frac{AG}{4} \right\rfloor \\ if\ AG \geq 60; \left\lfloor 75 + \frac{AG - 60}{1.6} \right\rfloor \end{cases}$$

Where,

TG = **Transmuted Grade**
AG = **Actual Grade**
$\lfloor\ \rfloor$ = **Round down** to the nearest integer.

Using the computed transmuted grade, get the equivalent grade point and based on the grade point, get the description. Please refer to the table below. Use the **`if..else`** and **`switch`** constructs in implementing these given tasks.

Transmuted Grade	Grade Point	Description
95-100	1.00	Outstanding
91-94	1.25	Superior
88-90	1.50	Very Satisfactory
86-87	1.75	Very Satisfactory
84-85	2.00	Satisfactory
82-83	2.25	Satisfactory
79-81	2.50	Fair
77-78	2.75	Fair
76-75	3.00	Fair
74-60	5.00	Failure

Output on the screen the values read and the weights, actual total grade, transmuted grade and its description.

Below is the sample output of the program.

```
Enter grade for Quizzes: 88.5
Enter grade for Midterm exam: 90.42
Enter grade for Final exam: 85.93
Enter grade for Project: 87.65
Enter grade for Reciation: 80.7

--------------------------------------------------------------------------------
REQUIREMENT           GRADE      WEIGHT
--------------------------------------------------
Quizzes               88.50      25%
Midterm Exam          90.42      20%
Final Exam            85.93      25%
Project               87.65      20%
Recitation            80.70      10%

Actual Grade:         87.29
Transmuted Grade:     92
Grade point:          1.25
Description:          Superior
```

You can use the table below to verify if your computation for the transmuted grade for a given actual grade is correct.

Actual Grade	Transmuted Grade	Actual Grade	Transmuted Grade	Actual Grade	Transmuted Grade
100.00	100	77.60-79.19	86	48.00-51.99	72
98.40-99.99	99	76.00-77.59	85	44.00-47.99	71
96.80-98.39	98	74.40-75.99	84	40.00-43.99	70
95.20-96.79	97	72.80-74.39	83	36.00-39.99	69
93.60-95.19	96	71.20-72.79	82	32.00-35.99	68
92.00-93.59	95	69.60-71.19	81	28.00-31.99	67
90.40-91.99	94	68.00-69.59	80	24.00-27.99	66
88.80-90.39	93	66.40-67.99	79	20.00-23.99	65
87.20-88.79	92	64.80-66.39	78	16.00-19.99	64
85.60-87.19	91	63.20-64.79	77	12.00-15.99	63
84.00-85.59	90	61.60-63.19	76	8.00-11.99	62
82.40-83.99	89	60.00-61.59	75	4.00-7.99	61
80.80-82.39	88	56.00-59.99	74	0.00-3.99	60
79.20-80.79	87	52.00-55.99	73		

$$TG = \begin{cases} if\ AG < 60; \left\lfloor 60 + \frac{AG}{4} \right\rfloor \\ if\ AG \geq 60; \left\lfloor 75 + \frac{AG - 60}{1.6} \right\rfloor \end{cases}$$

Where,

TG = **Transmuted Grade**

AG = **Actual Grade**

$\lfloor\ \rfloor$ = **Round down** to the nearest integer.