Formatting Table

1. All of you must have visited PDC website to check the daily menu. Today write a program that gives the output similar to that menu. Use functions of <iomanip> for the formatting and simply display the table using cout statements.

Sr#	Item	QP (Rs.)	HP (Rs.)	SP (Rs.)
1	Chicken Shashlik	-	140	210
2	Pepper Fried Chicken	-	-	140
3	White Lobia	30	40	60
4	Aaloo Ki Bhujia	30	40	60
5	Roti	-	-	5

[25 marks]

2. Write a program which asks the user to enter the month no. (1 for January, 2 for February and so on) and then prints the total number of days (30, 31 or 28) in that particular month. You don't need to write 12 if-else statements for this purpose; use as few statements as possible. *[25 marks]*

3. Write a program which asks the user to enter any character from the keyboard and checks whether it is vowel or not. In case if it is vowel it should display a message, "This is a vowel". In other case it should print the next character after it according to ASCII table.

Hint: Use type conversion/casting to store the ASCII code of entered character. Increment the value and then convert it into character again.

ASCII	Hex	Symbol	ASCII	Hex	Symbol	ASCII	Hex	Symbol	ASCII	Hex	Symbol
0	0	NUL	16	10	DLE	32	20	(space)	48	30	0
1	1	SOH	17	11	DC1	33	21	!	49	31	1
2	2	STX	18	12	DC2	34	22	"	50	32	2
3	3	ETX	19	13	DC3	35	23	#	51	33	3
4	4	EOT	20	14	DC4	36	24	$	52	34	4
5	5	ENQ	21	15	NAK	37	25	%	53	35	5
6	6	ACK	22	16	SYN	38	26	&	54	36	6
7	7	BEL	23	17	ETB	39	27	'	55	37	7
8	8	BS	24	18	CAN	40	28	(	56	38	8
9	9	TAB	25	19	EM	41	29	)	57	39	9
10	A	LF	26	1A	SUB	42	2A	*	58	3A	:
11	B	VT	27	1B	ESC	43	2B	+	59	3B	;
12	C	FF	28	1C	FS	44	2C	,	60	3C	<
13	D	CR	29	1D	GS	45	2D	-	61	3D	=
14	E	SO	30	1E	RS	46	2E	.	62	3E	>
15	F	SI	31	1F	US	47	2F	/	63	3F	?

ASCII	Hex	Symbol	ASCII	Hex	Symbol	ASCII	Hex	Symbol	ASCII	Hex	Symbol
64	40	@	80	50	P	96	60	`	112	70	p
65	41	A	81	51	Q	97	61	a	113	71	q
66	42	B	82	52	R	98	62	b	114	72	r
67	43	C	83	53	S	99	63	c	115	73	s
68	44	D	84	54	T	100	64	d	116	74	t
69	45	E	85	55	U	101	65	e	117	75	u
70	46	F	86	56	V	102	66	f	118	76	v
71	47	G	87	57	W	103	67	g	119	77	w
72	48	H	88	58	X	104	68	h	120	78	x
73	49	I	89	59	Y	105	69	i	121	79	y
74	4A	J	90	5A	Z	106	6A	j	122	7A	z
75	4B	K	91	5B	[	107	6B	k	123	7B	{
76	4C	L	92	5C	\	108	6C	l	124	7C		
77	4D	M	93	5D	]	109	6D	m	125	7D	}
78	4E	N	94	5E	^	110	6E	n	126	7E	~
79	4F	O	95	5F	_	111	6F	o	127	7F	

[25 marks]

4. A T-shirt brand has announced some discount deals on all shirts as per following:

Number of shirts	Discount
3 – 9	10%
10 – 19	15%
20 – 29	20%
30 or more	25%

Note: The individual shirt price is Rs. 900 without any discount.

The company needs you to develop a basic application for their customers which shows them the total bill for their expected purchase before placing an order. This app should ask the user to enter the number of shirts he/she wants to purchase and then display the total bill and price per shirt. Both the bill and price/shirt must be displayed after applying discounts if applicable. Your application should notify an error message to the user if the entered input is zero or negative.

[25 marks]