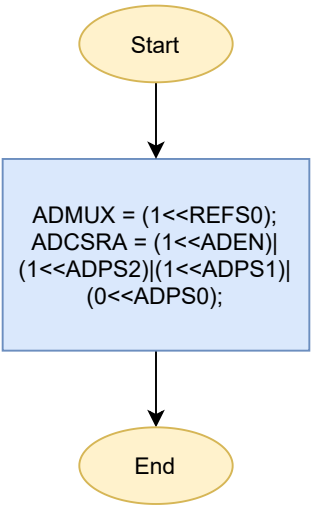# ADC INITIALIZATION FUNCTION

This function is called in our program to initialize the ADC channel when our system starts as ADC pins are used to measure the level of voltage from its pins and convert it into appropriate value. It is called by writing:
adc_init();
in the code.

Start

ADMUX = (1<<REFS0);
ADCSRA = (1<<ADEN)|
(1<<ADPS2)|(1<<ADPS1)|
(0<<ADPS0);

End

ADC Read Function

It is the function used to read the value at the ADC pins of the microcontroller .
It us called by writing:
adcx=adc_read(x);
where:
adcx = unsigned integer in which the value from ADC pin is stored .
x=pin from which the ADC value is to be read .

Start

Initialize:
uint8_t ch=value sent when function is called

ch &= 0b00000111;
ADMUX = (ADMUX & 0xF8)|ch;
ADCSRA |= (1<<ADSC);

If (ADCSRA & (1<<ADSC)=1);

Yes

No

Return(ADC)

End