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| 교육 제목 | python 3 |
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| **교육 내용** | |
| 오전 | numbers = [273, 103, 5, 32, 65, 9, 72, 800, 99]  for number in numbers:  if number>=100:  print("- 100 이상의 수 : ", number)  -------------------------------------------------------------  list\_of\_list = [  [1, 2, 3],  [4, 5, 6, 7],  [8, 9],  ]  for list\_item in list\_of\_list:  for item in list\_item:  print(item)  --------------------------------------------------------------  dict\_b = {  "director": ["안소니 루소", "조 루소"],  "cast": ["아이언맨","타노스","토르","닥터스트레인지","헐크"]  }  print(dict\_b)  ----------------------------------------------------------------------  dictionary = {  "name": "7D 건조 망고",  "type": "당절임",  "ingredient": ["망고", "설탕", "메타중아황산나트룸", "치자황색소"],  "origin": "필리핀"  }  print("name:", dictionary["name"])  print("type:", dictionary["type"])  print("ingredient:", dictionary["ingredient"])  print("origin:", dictionary["origin"])  print()  dictionary["name"] = "8D 건조 망고"  print("name:", dictionary["name"])  -----------------------------------------------------------------------------  dictionary["new"]="새로운 값 추가" # 딕셔너리에 새로운 값 추가  print(dictionary)  #dictionary의 값 제거 del  del dictionary["origin"]  dictionary  ---------------------------------------------------------------------------  key = input("딕셔너리 접근 키 입력 : ")  if key in dictionary:  print(dictionary[key])  else:  print("존재하지 않는 키입니다.")  ----------------------------------------------------------------------------  diction = {}  print("요소 추가 이전:", diction)  diction["name"]="new name"  diction["head"]="new mental"  diction["body"]="new body"  print("요소 추가 이후 : ", diction)  -------------------------------------------------------------------------------  value1 = dictionary.get("name")  value2 = dictionary.get("abcde")  print(" value1 : ", value1)  print(" value2 : ", value2)  if not value2:  print("None")  -------------------------------------------------------------------------------  #for 문장을 사용하여 dictionary의 값을 출력  for key in dictionary:  print(key, " : ", dictionary[key])  -----------------------------------------------------------------------------  type("문자열") is str #문자열인지 확인  type([]) is list #리스트인지 확인  type({}) is dict #딕셔너리인지 확인  ------------------------------------------------------------------  character = {  "name": "knight",  "level": 12,  "items": {  "sword": "flame sword",  "armor": "full flate"  },  "skill": ["베기", "세게 베기", "아주 세게 베기"]  }  for key in character:  if type(character[key])==list:  print("list : ", character[key])  for kkey in character[key]:  print(key, " : ", kkey)  elif type(character[key])==dict:  for pkey in character[key]:  print(pkey, " : ", character[key][pkey])  else:  print(key, " : ", character[key]) |
| 오후 | for i in range(5):  print(str(i) + "=반복 변수")  print()  for i in range(5,10):  print(str(i)+ "=반복변수")  print()  for i in range(0, 10, 3):  print(str(i)+ "=반복변수")  print()  ----------------------------------------------------------------------------  array=[273, 32, 108, 57, 52]  #리스트에 반복문 적용  index=1  for i in array:  print(" {}번째 반복 : {}".format(index, i))  index+=1  # range 함수를 이용하여 범위 지정하여 반복  for i in range(len(array)):  print(" {}번째 반복 : {}".format(i+1, array[i]))  # 거꾸로 출력  for i in range(len(array),0,-1): # -1 씩 감소  print(" {}번째 반복 : {}".format(i, array[i-1]))  # reverse로 출력  for i in reversed(range(len(array))): #뒤에서부터 출력  print(" {}번째 반복 : {}".format(i, array[i]))  --------------------------------------------------------------------  #while 조건식:  # 처리문  i=0  while i < 10: # 조건식을 탈출하는 구문이 while 처리문 안에 존재해야 함  print(".", end="")  i+=1  -------------------------------------------------------------------------------  import time  number=0  target\_tick = time.time()+5  while time.time()< target\_tick:  number+=1  print("5초 동안 {}번 반복했습니다.".format(number))  -------------------------------------------------------------------------------  i=0  while i<10:  i+=1  if i==9:  break  elif(i%2==0):  continue  else:  print(i)  print("i == ", i)  -------------------------------------------------------------------------------  char\_list = ['+','-','\*','/']  while True:  input\_char = input("> 부호입력 ( #이면 종료, +, -, \*, /) : ")  if input\_char=='#':  break  elif input\_char in char\_list:  while True:  input\_num=input("두 개의 숫자 입력)").split()  if len(input\_num)==2:  break  value1=int(input\_num[0])  value2=int(input\_num[1])  if input\_char=='+':  print("{}{}{}={}".format(value1, input\_char,value2, value1+value2))  elif input\_char=='-':  print("{}{}{}={}".format(value1, input\_char,value2, value1-value2))  elif input\_char=='\*':  print("{}{}{}={}".format(value1, input\_char,value2, value1\*value2))  else:  if value1!=0 and value2!=0:  print("{}{}{}={}".format(value, input\_char,value2, value1/value2))  else:  print("0은 나눌 수 없습니다")  print("program end")  ----------------------------------------------------------------------------------  key\_list=["name","hp","mp","level"]  value\_list=["knight", 200, 30, 5]  character = {}  for i in range(len(key\_list)):  character[key\_list[i]]=value\_list[i]  character  --------------------------------------------------------------------------------  numbers= [102, 53, 273, 32, 77, 55]  min\_value=numbers[0]  sum\_value=0  for value in numbers:  sum\_value+=value  if min\_value>value:  min\_value=value  print(min\_value)  print(sum\_value)  print(sum(numbers))  print(min(numbers))  print(max(numbers))  print(list(reversed(numbers)))  print(numbers[ : : -1])  print(sum(numbers,start=2), sum(numbers,start=0))  ---------------------------------------------------------------------------------  numbers= [102, 53, 273, 32, 77, 55]  print(list(enumerate(numbers)))  print(numbers)  for i in range(len(numbers)):  print("{}번째 요소 : {}".format(i, numbers[i]))  print("\nenumerate")  for i, value in enumerate(numbers): #enumerate : list의 인덱스와 값을 리턴  print("{}번째 요소 : {}".format(i, value))  ----------------------------------------------------------------------------------  input\_list=list(input("임의의 숫자").split())  for i, value in enumerate(input\_list):  input\_list[i]=int(value)  print("{}번째 요소 : {}".format(i,value))  print(sum(input\_list))  print(min(input\_list))  print(max(input\_list))  ---------------------------------------------------------------------------------  character = {  "name": "knight",  "level": 12,  "items": {  "sword": "flame sword",  "armor": "full flate"  },  "skill": ["slash", "power slash", "hyper slash"]  }  # 딕셔너리.items() 사용하기  for key, element in character.items():  if type(element)==list:  for value in element:  print(key, " : ", value)  elif type(element)==dict:  for value in element:  print(value, " : ", element[value])  else:  print(key, " : ", element)  ------------------------------------------------------------------------------------  array=[]  for i in range(0,20,2):  array.append(i\*i)  print(array)  # list 안에 for 문장 사용 -> [표현식 for 변수 in 반복 if 조건식]  array1=[i\*i for i in range(0,20,2)] #반복 자료에서 아이템 1개를 가져와서 i에 입력후 i\*i 실행  print("array1 : ", array1)  #조건식ㅇㅡㄹ 조합  array2=[i\*i for i in range(0,20) if i%2==0]  print("array2 = ", array2)  -----------------------------------------------------------------------------------  input\_num=input("아무 숫자").split()  for i, value in enumerate(input\_num):  input\_num[i]=int(value)  list\_6=[i for i in input\_num if i%6==0]  list\_3=[i for i in input\_num if i%3==0 and i%6!=0]  list\_2=[i for i in input\_num if i%2==0 and i%6!=0]  print(list\_6)  print(list\_3)  print(list\_2)  -----------------------------------------------------------------------------------  # def 함수명():  # 실행문  def print\_func(value, \*values, n=3): # value : 일반 매개변수, values : 가변 매개변수, n : 기본 매개변수  for i in range(n):  for item in values:  print(value, " : ", item)  return "break"  return "end"  a=print\_func("Hello","abcd","efg") #print\_func(value="Hello", n=3)  print(a)  ----------------------------------------------------------------------------------------  buho\_list=['+','-','\*','/','#']  def input\_fun():  while True:  input\_char=input("부호 입력 : ")  if input\_char in buho\_list:  return input\_char  def input\_number():  while True:  input\_number=input("두 수 입력 : ").split()  if len(input\_number)==2:  return input\_number  def plus\_func(values):  return(values[0]+values[1])  def minus\_func(values):  return(values[0]-values[1])  def mul\_func(values):  return(values[0]\*values[1])  def div\_func(values):  return(values[0]/values[1])  while True:  buho\_char=input\_fun()  if buho\_char=='#':  break  else:  values=input\_number()  for i, value in enumerate(values):  values[i]=int(value)  if buho\_char=='+':  result=plus\_func(values)  elif buho\_char=='-':  result=minus\_func(values)  elif buho\_char=='\*':  result=mul\_func(values)  else:  result=div\_func(values)  print("{} {} {} = {}".format(values[0], buho\_char, values[1], result)) |